



PALLISER SOUTH

HEATING, VENTILATION, & AIR CONDITIONING FACTSHEET

Address: 140 – 10th Avenue SE, Calgary, AB

General Description: Palliser South is one building of five in the Palliser Complex. It is approximately 300,500 square foot in size over 19 floors. Parking is provided in the attached 1,398 stall Palliser Parkade.

Mechanical Engineer: Smith Andersen Engineering Ltd.

General:

- The building automation is Delta Controls, Enteliweb Operating System.
- Heating and cooling to the tenant spaces is provided by perimeter radiant panels in the ceiling throughout Compartmental Units (1 zone per floor) and Variable Air Volume (“VAV”) interior and exterior air boxes (15-25 per floor).
- All chillers were replaced between 2003 and 2008, annual efficiency testing and inspections for the boilers.

Design Criteria: The building’s HVAC systems are designed to meet or exceed ASHRAE Building Code requirements. Central air distribution is by one outdoor air unit that provides fresh air to the floors. Each floor is zoned with one Compartmental Unit air system that provides conditioned air through VAV systems located in the ceiling plenum.

Filters: MERV 13 bag filters. Bag filter changes are based on pressure drop over the filter bank averaging between 1-2 years depending on outdoor air quality.

Heat: Heat is supplied from a Central Plant with 4 Cleaver Brooks Steam boilers. Radiant heat and Fan heating systems are converted from steam supplied from the Central Plant.

Air Conditioning: Cooling is provided from the Central Plant by a “free cooling” that operates up to 12 Degrees Celsius outdoor air and with 3 York chillers; two 900 ton and one 600 ton. Chilled water is pumped to Palliser South to provide cooling for the compartmental units on each floor.

Air Exchange: Tower Floor Air Exchanges will be up to 6 times per hour with a complete Outdoor air replacement every 90 minutes.

Standard Hours of HVAC Operation: 6:00 a.m. to 6:00 p.m. Monday to Friday



COVID-19 and HVAC

Ventilation and filtration provided by HVAC systems can reduce the airborne concentration and risk of transmission through the air. However, even the most robust HVAC system cannot control all airflows and completely prevent the spread of the virus. Ventilation and effective airflow pattern is however a primary infectious control strategy. The filtration systems in Palliser South are first class and at the high end of the MERV (Minimum Efficiency Reporting Value) rating system. With the warmer weather, our dampers are open to allow for maximum fresh outdoor air to dilute air contaminants that are generated by the building, its furnishings and its occupants that may potentially carry COVID-19.