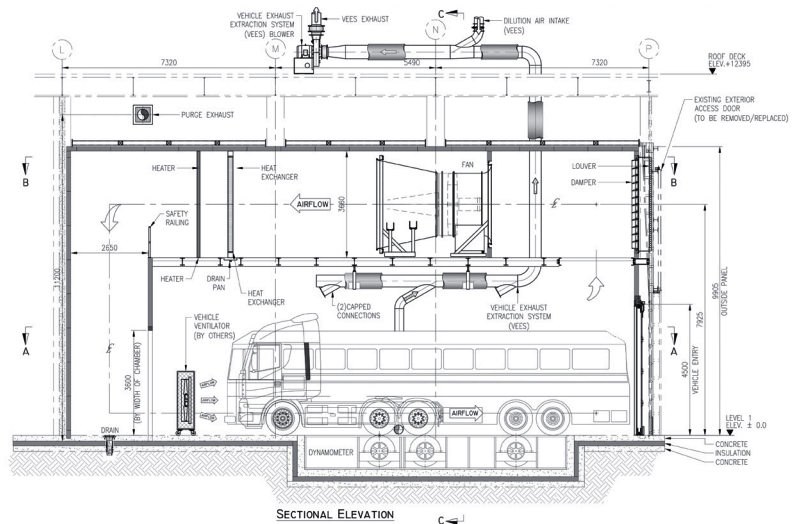
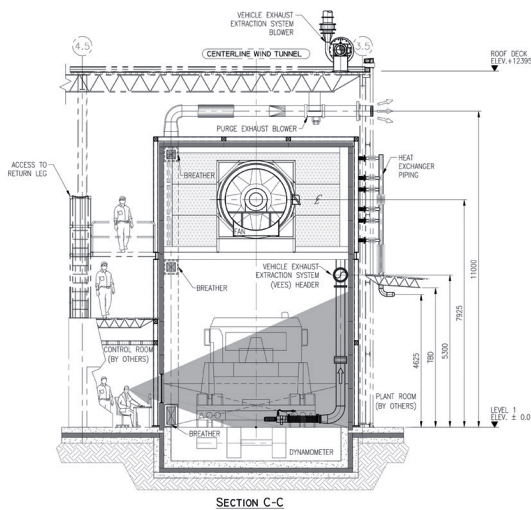


MotiveLab

All Weather Climatic Chamber and Chassis Dynamometer Test Facility

MotiveLab is a living response to Manitoba's heavy vehicle manufacturing sector, which expressed a desire for a combination All Weather Climatic Chamber and Chassis Dynamometer test facility that could cater to vehicles of all sizes spanning many different vehicle markets.

The 7,000-square foot research facility at Red River College is focused on supporting Manitoba's heavy vehicle sector.



What Can MotiveLab Do?

- MotiveLab will have the ability to test vehicles at temperature extremes throughout the year, while under full-load conditions.
- The climatic chamber will have an operating temperature capability of between -40°C and +50°C (independent of outside ambient temperature).
- MotiveLab will be capable of accommodating transit buses and highway coaches, as well as off-highway vehicles such as tractors and self-propelled harvesting equipment.
- Vehicles can be tested on an integrated, adjustable, high-performance, three-axis 1,000 HP chassis dynamometer.
- MotiveLab will be able to simulate various ground topologies, such as slopes.
- The Chassis Dynamometer has the ability to regenerate the power it produces back into the overall chamber power load.
- Additional research equipment/instrumentation includes portable emissions test equipment, data loggers, a biodiesel refinery, a 7.7KW Level 2 AC charging station, a 30KW DC quick charger, specialized battery testers, tools and protective equipment required for testing electric vehicle batteries.

Why Create MotiveLab?

- MotiveLab addresses the sector's lack of access to appropriate and/or comprehensive domestic test facilities, considerable pressure from regulatory bodies for emissions control and fuel efficiencies, and the availability of highly qualified and skilled personnel for the workforce.
- MotiveLab will be the cornerstone of Red River College's new Vehicle Technology & Energy Centre.
- Once fully operational, MotiveLab will represent a capital investment of \$10 million.
- MotiveLab will be a unique facility for Western Canada, capable of supporting on- and off-highway heavy vehicle testing and development requirements for the region.
- A secondary use will be aerospace-related applications requiring access to a temperature-controlled test environment.