

Portable Variable Air Volume Apparatus

Emily Albano, Christina McCusker, Avah Strueby (ISE1) Supervisor: Dr. Adisorn Aroonwilas (ISE)



Mechanical Consulting Engineers

Background

In 2018, the University of Regina introduced an HVAC&R undergraduate course and laboratory. Since then, the instructors has been aiming to supplement the course material with laboratory equipment.

Project Goals/Objectives

Design and construct a portable, interactive teaching tool that demonstrates the fundamental principles of air movement, heat transfer, and building control for use in the University of Regina HVAC&R laboratory.

Cost Breakdown Accessories Stand \$97 \$260 **Equipment** \$2,759 **Powder** Coating \$183 **Controls** \$7,970

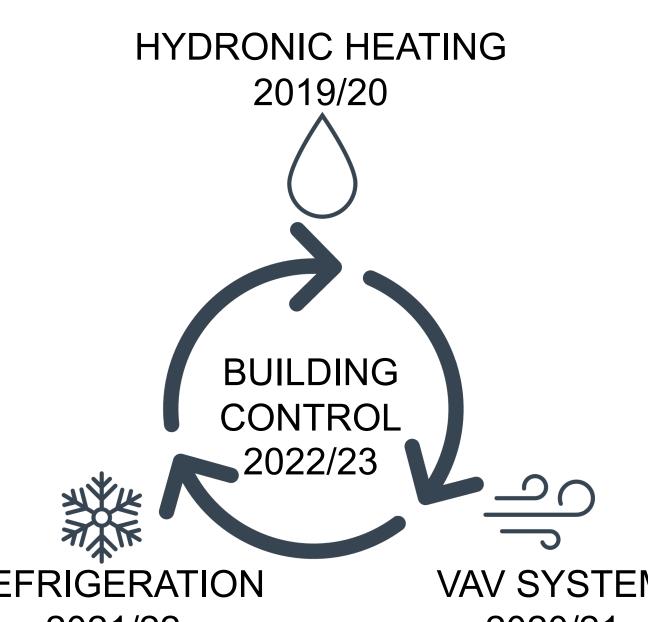
Design Main Air Duct Balancing Dampers VAVs Electric Miniature Duct Heater Rooms Fan Coil







Going Forward







Project Timeline







Layout Design



Fabrication





