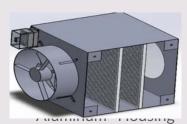
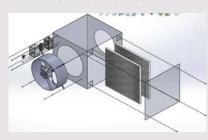
Project Overview

Our sponsor needed to study the current system, to improve the filtration, and the air exchange through design recovery. Then, to analyze the reason behind the current problem to be able to improve the air quality. An HVAC system was implemented inside the room to filter all toxic chemicals that flow within the room as the original system was effected with toxic fumes when running certain equipment.

Final Design



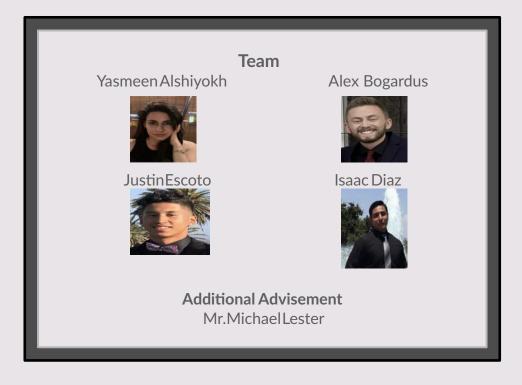
- 1600 CFM Axial Fan
 - Hepa Filter
- Activated Charcoal Filter
 - Electrical outlet box



THE EIS106B LAB VENTILATION SYSTEM

Project 31 Team W8 - BADE Sponsored by Dr. Scott Shaffar at San Diego State University

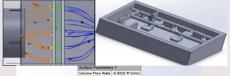


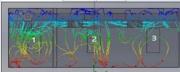




Analysis

Air Flow in BBX and room simulation





Manufacturing and assembly E-outlet box and Front Face





Assembled Device



Spring 2021