BIG BUILDING VENTILATION
VENTILATION IN COMMERCIAL PASSIVE HOUSE SETTING
AS BUILT PROJECT DETAILS

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PROJECTS

• CEED Center – school demonstration
  ➢ Central with shared supply

• Emory & Henry College - Dorm
  ➢ Multiple shared units, independent ducting

• Hillel – center for Jewish life
  ➢ Central and independent units, CO2 control, independent ducting

• McKeesport – homeless shelter
  ➢ Central units, independent ducting
PROJECTS

CEED CENTER
The Passivhaus dorm will use 74% less energy than a code-built building, and, at just $118.75/SF, cost less to build than its conventionally-built twin dorm, Elm Hall.
CO2 controllers are programmed: 600-1500 ppm = 0-10 vdc out - linear
RELATIONSHIP:
All CO2 monitors below 600 ppm = 0 Vin = ~400 CFM = 20% pwm
All CO2 monitors above 1500 ppm = 10 Vin = ~2000 CFM = 100% pwm

Remaining pwm = 80% [100-20]
Remaining flow = 1600 CFM [2000-4000]

NOTE: target max flow is 1480 CFM
Unit can push 2000 CFM and since we have control based on CO2- no reason not to use full flow range
THANK YOU

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