



Professional installation & IAQ management



Monitor a building's supply, return, or outdoor air quality



Control the building's forced air equipment for on-demand filtration, ventilation, and de/humidification



Notifications & recommendations through the HAVEN IAQ App when poor air quality is detected



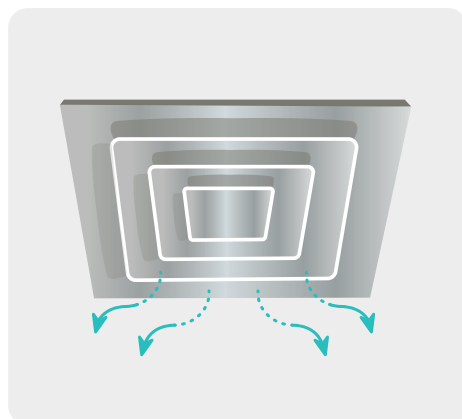
HAVEN Pro Web Portal allows for remote monitoring and diagnostics

Deployment Options



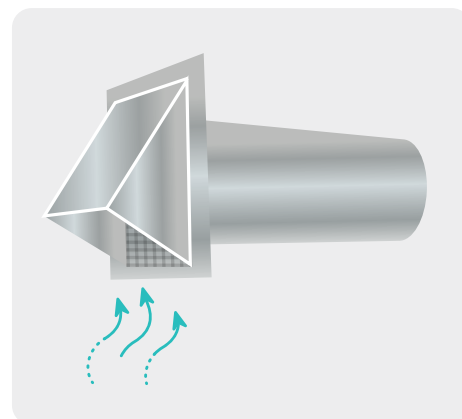
RETURN AIR

Monitor pollutants generated in the occupied space & filter lifetime



SUPPLY AIR

Validate the amount and quality of the air being supplied to occupants



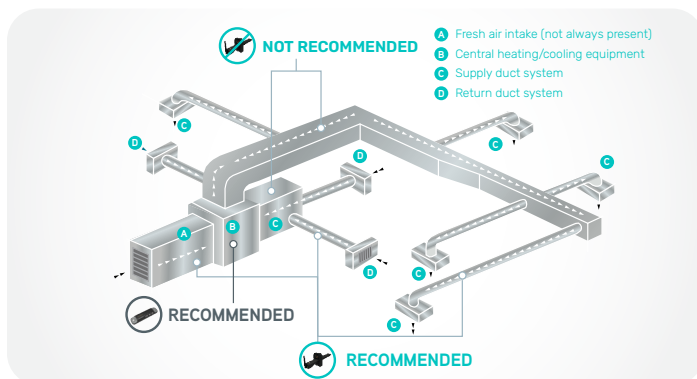
OUTDOOR AIR

Detect when outdoor air is too polluted to bring indoors

Deployment Best Practices

- 1 **Deploy 1 Monitor per zone, or up to 3 Monitors measuring supply, return, and outdoor air**
- 2 **Install unlimited Controllers per Monitor to automate ancillary equipment on-demand**
- 3 **Airflow velocity up to 1200FPM**
- 4 **Requires 4ft+ of straight ductwork**
- 5 **Building must have 2.4GHz WPA2 Wi-Fi**

Recommended Indoor Installation



Install in straight ductwork section
Avoid trunks & keep airflow below 1200fpm

Outdoor Installation Not Advised



Avoid installing too close to AHU
Monitor devices are not outdoor rated

Technical Compatibility Details

DUCT WORK

- At least 4ft of straight duct to reduce turbulence
- Depth/diameter of 8" or more, and less than 4ft in depth/diameter

AIRFLOW

- Optimal Air velocity: 200-600fpm (80 fpm minimum, 1200fpm maximum)
- Measurements will not be taken when the ductwork has no airflow

SOFTWARE

- HAVEN Pro Portal: Website for remote diagnostics and data analysis
- HAVEN IAQ App: For Pro installation, customer data exploration, and notifications
- Grafana Dashboard (upon request): Experimental web page for building operators

POWER

- Voltage: 24VAC recommended
- Load: 2W during operation

WIRELESS

- 2.4GHz Wi-Fi with WPA2 Security
- Not compatible with enterprise Wi-Fi (EAP-TLS or RADIUS)
- Corporate networks with strict firewall rules may interrupt HAVEN communications with the cloud

Grafana Dashboard

For experimental features (like CFM & ACH), please email prosupport@haveniaq.com with the following parameters:

- Supply duct cross section measurements
- Zone square footage
- Zone ceiling height
- Desired CFM & ACH
- Reference air velocity at Monitor Install location

Light Commercial installations of the Central Air Monitor and Controller are currently experimental and are conducted at the dealer's risk. HAVEN does not guarantee that the Monitor & Controller are compatible with commercial buildings. It is not recommended to install HAVEN in heavy commercial or industrial buildings.