



Aethair Pro is the ideal air monitoring solution for construction perimeter monitoring, providing real-time measurement of particulates (PM1, PM2.5, and PM10), silica exposure, and volatile organic compounds (VOCs). With its advanced sensor capabilities, Aethair Pro ensures compliance with state, local, and federal regulations while significantly reducing costs compared to traditional, bulky, and expensive rental equipment.

## Importance of Perimeter Air Monitoring in Construction

Airborne particulate matter and VOC emissions from construction activities pose significant health and environmental risks. Aethair Pro provides continuous perimeter monitoring to:

- **Ensure Regulatory Compliance:** Meet OSHA, EPA, and local air quality standards.
- Detect Silica Exposure in Real Time: Monitor & mitigate silica dust levels to protect workers and nearby communities.
- Track VOC Emissions: Identify hazardous compounds from fuel, adhesives, and building materials.
- > Reduce Monitoring Costs: Eliminate the need for expensive, cumbersome rental kits.

#### Key Monitoring Capabilities of Aethair Pro

Feature	Specification
PM1, PM2.5, PM10 Monitoring	Real-time measurement of airborne particulates
Silica Dust Detection	Continuous tracking of respirable crystalline silica (RCS)
VOC Detection Sensitivity	ppb-level detection for hazardous emissions
Regulatory Compliance Alerts	Automatic notifications when thresholds are exceeded
Data Logging & Remote Access	Cloud-based reporting for documentation and compliance

#### **Key Airborne Contaminants at Construction Sites**

Contaminant	Source	Potential Impact on Workers & Environment
PM1, PM2.5, PM10	Dust from excavation, concrete, & demolition	Respiratory issues, environmental pollution
Silica Dust (RCS)	Cutting, grinding, and drilling concrete	Severe lung disease (silicosis)
VOCs	Paints, adhesives, fuel emissions	Long-term health effects, regulatory concern

#### Benefits of Aethair Pro in Construction Perimeter Monitoring

Benefit	Impact	
Real-Time Silica Monitoring	Protects workers and ensures compliance	
Reduced Monitoring Costs	Eliminates need for expensive rental equipment	
Regulatory Compliance Assurance	Meets OSHA, EPA, and local air quality standards	
Remote Access & Data Logging	Oata Logging Cloud-based monitoring for instant access	
Enhanced Site Safety	Mitigates risks to workers and nearby communities	

## **Applications in Construction Sites**

Application	Monitoring Focus	
Demolition & Excavation	Monitoring airborne particulates and silica levels	
Concrete Cutting & Grinding	Tracking respirable crystalline silica (RCS) exposure	
Painting & Coatings	Measuring VOC emissions	
Perimeter Fenceline Monitoring	Ensuring compliance with regulatory air quality limits	
Worker Exposure Tracking	Protecting personnel from hazardous airborne materials	

# Conclusion

Aethair Pro is the most effective and cost-efficient solution for construction perimeter air quality monitoring. By delivering real-time data on PM1, PM2.5, PM10, silica, and VOCs, it ensures compliance with air quality regulations while drastically reducing costs compared to traditional monitoring techniques. Its advanced remote capabilities make it highly configurable for all air monitoring needs—indoor, outdoor, and on the go—providing unmatched protection for workers and communities.



# How can we help you?

If you would like to find out more about how we can help you, please give us a call or send us an email.

**%** aeth**air** 

See The Air You Breathe aethair.io