

# How Pillar is Helping AvalonBay Create Safer Construction Sites After a 30 Million Dollar Fire

**CASE STUDY** 



"Pillar's our partner in our fire elimination program. We have 1,600 of their sensors installed at 17 sites. Their systems are underwritten and required on every one of our wood-frame projects across the US. Period."



JEFF HUTCHENS, Head of Safety, AvalonBay Communities, Inc.



# III INDUSTRY Real estate





WHAT WE PROVIDED

#### Real-Time Monitoring of Construction Sites

- Temperature
- Humidity
- Pressure
- Volatile compounds
- Dust particulates

## **The Client**

#### AVALONBAY COMMUNITIES, INC.

AvalonBay Communities, Inc. is an equity real estate investment trust. They have developed and built over 250 communities in 15 states and they maintain a sterling reputation as one of America's top green builders and a leader in construction safety.

# The Challenge

# PREVENTING FIRES, WATER DAMAGE & OTHER ENVIRONMENTAL CONDITIONS BEFORE THEY OCCUR

At 2 AM on February 3 2017, a new 200-unit community in Maplewood, New Jersey burned down. AvalonBay had been only weeks away from turning over the first phase of apartments, and in one night their 18 months of progress had been reduced to nothing.

AvalonBay had always been a compliant builder, adhering to all Federal OSHA and NFPA guidelines and requirements, but it hadn't been enough to prevent this major project setback. The only silver lining was that the fire galvanized Head of Safety, Jeff Hutchens, to seek out better advance warning systems.



"In one night, we went from 18 months of construction progress to nothing."

"



### **The Solution**

#### **OVER 1,600 SENSORS AT 17 CONSTRUCTION SITES**

Pillar creates intelligent sensors that allowed Jeff to monitor environmental conditions on all of his active construction sites. Unlike competitor systems, Pillar's products are designed to survive harsh construction site working conditions and don't require users to manually check each sensor. Instead, all data is broadcast in real time to a cloud-based platform.

AvalonBay installed over 1,600 of these sensors across 17 different construction sites. These sensors allow them to monitor a variety of potentially hazardous environmental conditions in real-time, including freezing temperatures, potential fire risks, pre-mold conditions, and more.



"Pillar's sensors help us find potential water leaks, measure dust in the building sites, and monitor for volatile compounds such as spray paint. We also use the temperature info to help us find and stop potential pre-fire conditions."



# The Result

#### SAFER JOB SITES & MORE ACCURATE FRAMING SCHEDULES

Since installing Pillar at 17 different construction sites, Jeff has managed to detect and resolve a number of potentially disastrous situations before they could spiral out of control. These include water leaks and one site that reached dangerously high temperatures—potentially pre-fire conditions.

Pillar has also helped Jeff and senior leaders at AvalonBay gain a more accurate understanding of where each project is at. Framing schedule accuracy on all of their wood-frame projects is up 25%. Jeff sleeps better at night knowing that AvalonBay now has preventative measures in place to stop future setbacks.



"There were 18 large construction fires in 2017—\$480 million in losses. In 2018, there have already been eight fires and two fatalities. It shouldn't take a disaster to get us to adopt an advance warning system."







# Monitor your sites. Prevent damages. Build smarter.

Pillar Technologies gives you the power to view and manage data from your job sites so you can solve project setbacks before they happen.

**GET STARTED** 

If you would like to learn more about Pillar then please visit us at www.pillar.tech or call us at 1-209-718-1001