



Opti-Lok™ Testing

In Partnership with  HOFFMAN & HOFFMAN, INC.

The logo for Hoffman & Hoffman, Inc. consists of a blue circle containing the letters 'HH' in a white, stylized, blocky font.



 **HOFFMAN & HOFFMAN, INC.**

GPS Air and **Hoffman & Hoffman** partnered to test our new **filter-enhancing** product, **Opti-Lok™** in an effort to **improve indoor air quality**

Our ultimate goal from this testing was to understand the efficacy of Opti-Lok in a real-world environment, and the levers to pull in order to optimize the technology.



Real-World Testing

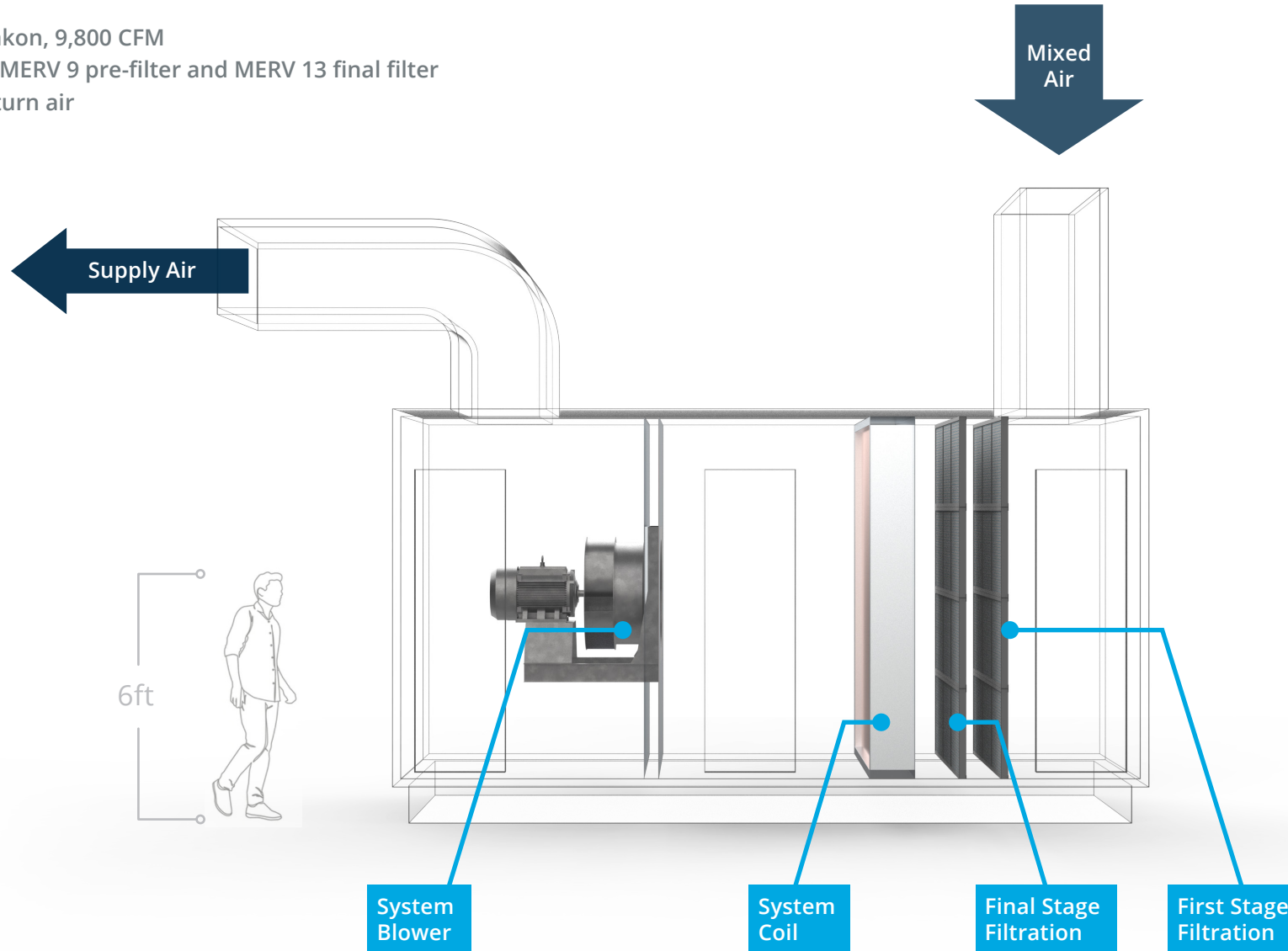
Hoffman & Hoffman offered GPS Air full access to their air handlers for an opportunity to collect real-world data. Our team set up and ran a number of tests that ultimately led to compelling results around the efficacy of our Opti-Lok technology.

Understanding the System

Air Handler Specs: Haakon, 9,800 CFM

Filtration: Two stages, MERV 9 pre-filter and MERV 13 final filter

Air Mix Ratio: 100% return air

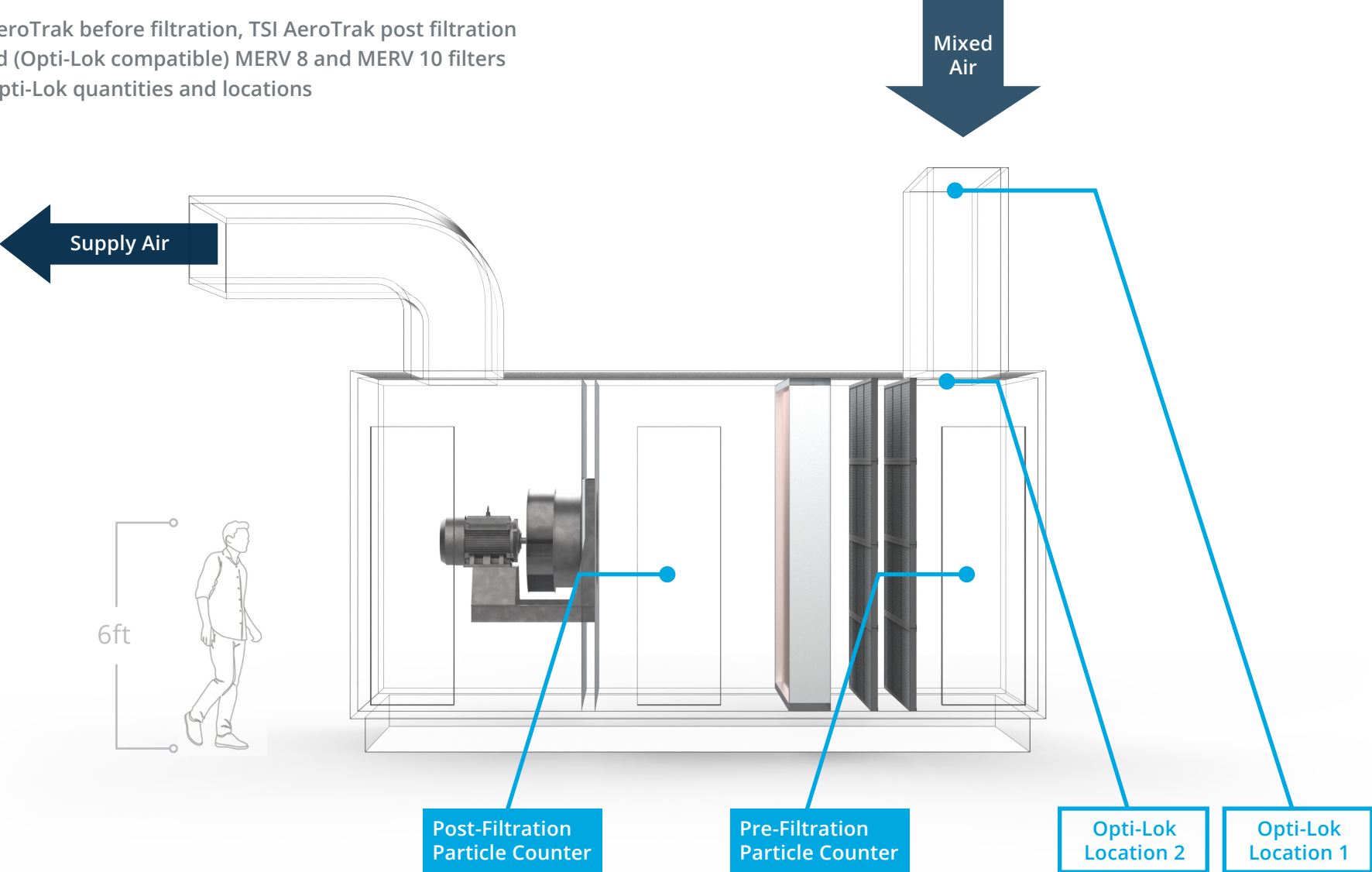


Test Configuration Overview

Particle Counters: TSI AeroTrak before filtration, TSI AeroTrak post filtration

Filtration: GPS Air tested (Opti-Lok compatible) MERV 8 and MERV 10 filters

Controls: Filter types, Opti-Lok quantities and locations

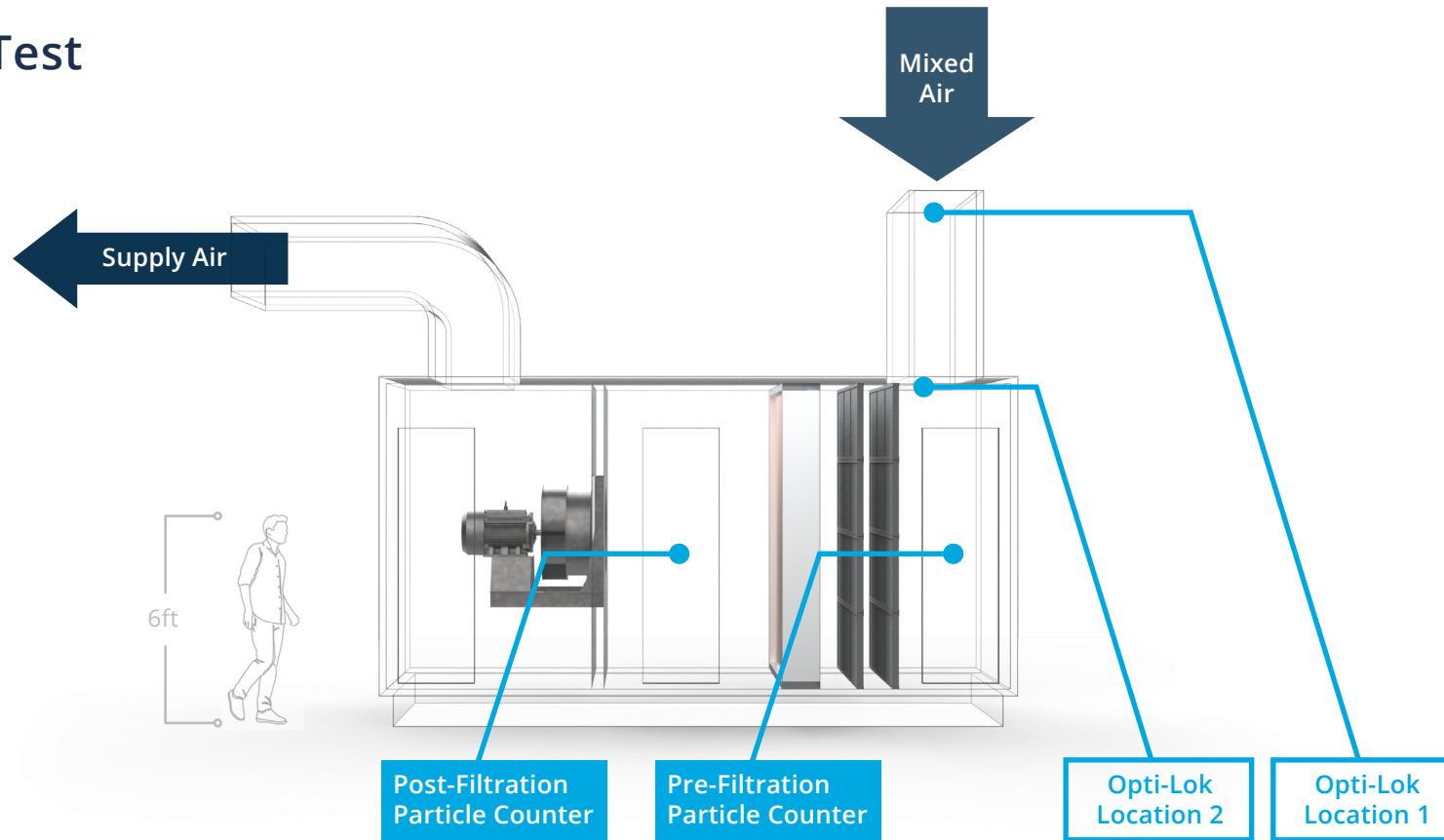




Hoffman Filter Test

In this first test, the main variable applied was the distance in which the Opti-Lok units were installed upstream from the filter. This test was ran using Hoffman's current MERV 9 and MERV 13 filters. The key learnings from this test includes an understanding of how efficacy changes in layouts like this as distance between the Opti-Lok technology and the filter changes.

Hoffman Filter Test



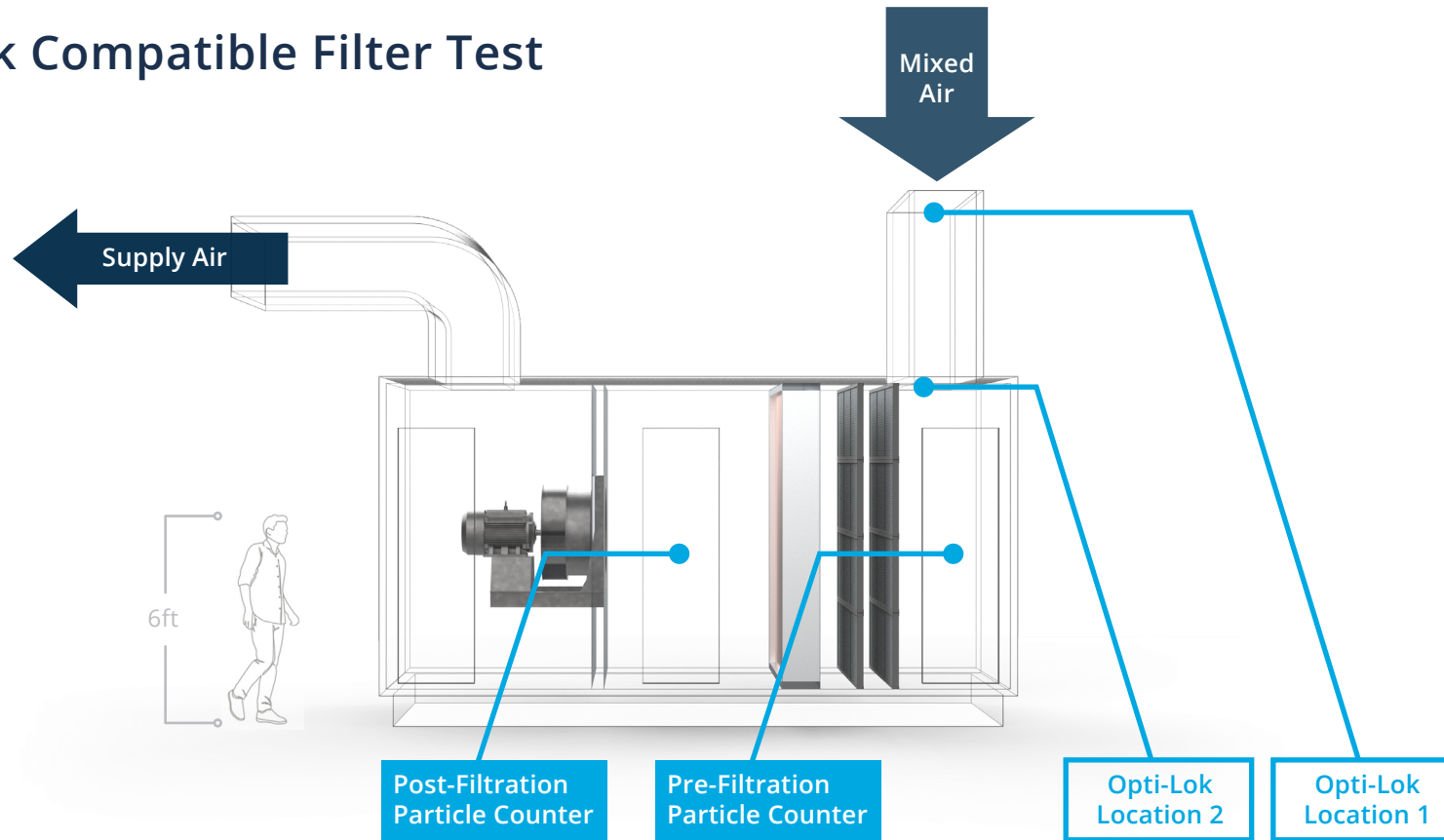
Hoffman Filter System Test (Hoffman's MERV 9 and MERV 13 filters)			
Test Configuration (Location, # of units, bin size)	Baseline (% Removal)	Opti-Lok ON (% Removal)	Performance Boost
Loc 1 > 5ft from filter, 3 Units, 0.3 µm	68	78	14.7 %
Loc 2 < 5ft from filter, 4 Units, 0.3 µm	68	77	13.2 %



GPS Air Opti-Lok Compatible Filter Test

This test applied the same variable of distance in which the Opti-Lok units were installed upstream from the filter. The main change here is the use of GPS Air Opti-Lok compatible filters with MERV 8 and MERV 10 ratings. This test helped to confirm the key learnings from the previous test, while also validating improvement gains using more compatible filters.

GPS Air Opti-Lok Compatible Filter Test



GPS Air Filter System Test (Opti-Lok Compatible MERV 8 and MERV 10 filters)			
Test Configuration (Location, # of units, bin size)	Baseline (% Removal)	Opti-Lok ON (% Removal)	Performance Boost
Loc 1 > 5ft from filter, 3 Units, 0.3 μ m	40	73	82.5 %
Loc 2 < 5ft from filter, 4 Units, 0.3 μ m	39	72	84.6 %

Our partnership with **Hoffman & Hoffman** proved to be a **success** and has helped us further our learnings around the efficacy of Opti-Lok. **The data** collected **further supports our confidence** in filter enhancement using **GPS Air's Opt-Lok technology**.



