

# CASE STUDY

Commercial and Public Building



**Client:**  
Online Vacation Rental

**Location:**  
India

**Date:**  
2021

**Sector:**  
Commercial Building

## WORLD LEADING ONLINE MARKETPLACE FOR VACATION RENTALS TRUSTS CAMFIL SOLUTIONS TO PROVIDE A HEALTHY & SAFE INDOOR AIR, FREE OF POLLUTANTS AND AIRBORNE INFECTIONS AT THEIR WORKPLACE

**INDIA IS WITNESSING HARMFUL LEVELS OF AIR POLLUTION THAT ARE AFFECTING BOTH WORK AND LIFE. IN THESE CHALLENGING TIMES, OUR CUSTOMER HAS MANAGED TO IMPROVE THE INDOOR AMBIENT AIR QUALITY BY 90%**

### CUSTOMER PROFILE

The customer is the world's biggest online marketplace that connects people for lodging, primarily homestays for vacation rentals, and tourism activities. The headquarters is based in the United States. It currently covers more than 100,000 cities and 220 countries worldwide.

In 2017, the customer decided to set up a new global capability center in Gurgaon, India. It is established to service the global community and provides diverse services under community support thereby sharing world-class customer experience with their shoppers. Besides this, the customer is also building deep capabilities for different verticals like homes, finance technology, finance shared services, analytics from the Indian workplace.

### RISING LEVELS OF INDOOR AIR POLLUTION

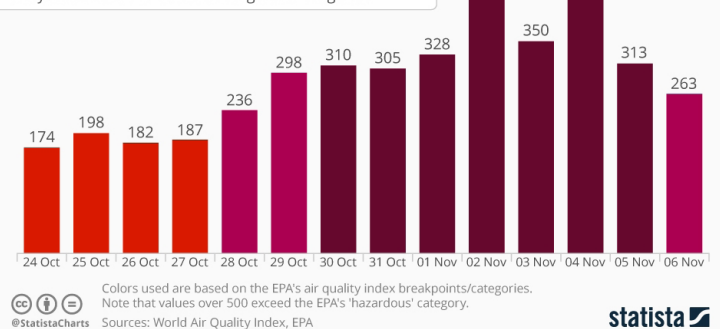
With the increase in indoor air pollution in India and its association with an increased number in morbidity and mortality, measures include accessing the exposure levels of the indoor air pollutants and using the right air filtration solutions.

The customer office is located in the National Capital Region of India where air quality index (AQI) typically ranges between 150 and 250 during March-September, and between 400 to 500 (maximum on the scale) during the months of October-February. It has become crucial to take effective measures against air pollution including a dedicated approach to ensure the health and safety of employees at the workplace.

### New Delhi's Hazardous Air Problem

Daily average PM2.5 levels recorded at the U.S. embassy in New Delhi

According to the U.S. Environmental Protection Agency (EPA), values over 300 are considered 'hazardous'. Anything above 150 is 'unhealthy' for everyone. Only values of 50 or less are categorised as 'good'.



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## OVERCOMING THE CHALLENGES

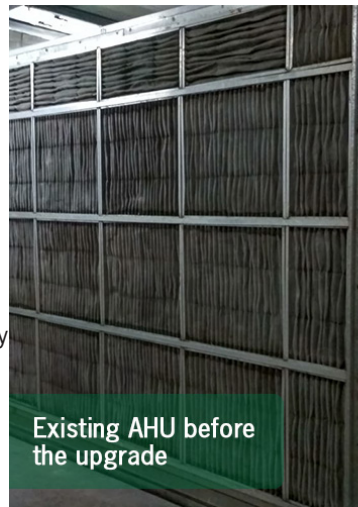
The facility management company managing the customer workplace connected with Camfil to upgrade the existing AHU filters to MERV 13 rated filters without impacting the air flows and pressure drops. The HVAC Consultant and OEM (AHU manufacturer) had raised concerns about upgrading existing AHU filters as the static pressures of the fans were relatively low for handling additional filter stages. Camfil's team provided solutions that will resolve these challenges and provide premium quality air following the **ASHARE/ISHARE guidelines** for the prevention of the COVID-19 virus.

## THE SOLUTION

Camfil's scope included implementing solutions to **keep the PM2.5 levels less than 60 micrograms per cubic meter on a 24-hour mean**. Our experts carried out the site surveys detailing every air handling unit, evaluating the fresh air intake units and return air paths. Existing non-graded local filters were replaced with two-stage ISO Coarse CM 360 followed by Camfil ISO 16890 rated PM2.5 filters (EcoPleat F7) on each of the 05 AHU's. New mainframes and universal frames were installed after dismantling the old frames. In addition, we added fresh air intake filters (ePM10 rated Dual 10 and frames) to check the ingress of polluted air through the fresh air inlet.

## KEY SUCCESS

1. **PM2.5 well within the National Ambient Air Quality standard.**
2. **No impact on airflow and electric consumption**
3. **Client is satisfied with the performance of the system**



### EcoPleat

- Ultra compact and ultra light
- Large surface area
- Long operating life
- Less frequent changes



### Dual10 Filters

- Water resistant frame board
- Diagonal support
- Radial Pleats
- Proprietary Dual High Lofted Fibers
- Built Strong



## CUSTOMER STORY

"We were looking for a high-performance AHU filters upgrade from our existing MERV 8 filters. These upgrades should be effective against harmful pathogens, pollutants and, energy-efficient with easy installation and maintenance. Our goal is to maintain the PM2.5 levels below 60 round the clock. Camfil met our demand with their ISO 16890 rated filters. The solution to our needs was provided quickly and we are fully satisfied"

- Facility Maintenance Manager of the end customer's installer