

# CASE STUDY

## Al Fattan Downtown Towers

### Luxury Apartment Buildings Achieve Code Requirements with AeroSeal

Comprising 3 residential towers, each 33-stories in height, facing Sheikh Zayed Road is a perfect triplet of luxurious living in a convenient setting. The apartment units feature 2 and 3 bedroom residences.

Ali Mousa & Sons Contracting is one of the leading contracting establishments in the United Arab Emirates since 1978. They have acquired a unique position as one of the most reputed and reliable construction companies marked by high-quality execution conducted by a team of highly professional, technical, and executive staff.

#### The Problem

It was identified while testing and balancing that the HVAC ducts running in the vertical shafts from the service floor at level 18 down were leaking. The time-consuming and disruptive demolition typically involved in finding, accessing, and sealing these leaks using hand sealing, made resolution procedures unfeasible at best.

**Use AeroSeal On Your Next Job For Faster, Guaranteed Results!**  
**CALL: 877-FIX-DUCT or VISIT: [www.aeroseal.com](http://www.aeroseal.com)**



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#### The Solution

Searching for a sealing solution, the MEP Operation Manager Mr. Salim Sheikh learned about AeroSeal duct sealing and decided it was the right choice for the job.

“We looked at several options and the AeroSeal technology stood out as being the most economical. Since time is of the essence and a commodity on high rise projects ” he said.

AirSeal Technical Services, a service provider of AeroSeal based in Dubai UAE, initiated a pilot project to showcase the ease and speed by sealing one of the Fresh Air riser ducts. Within 27 minutes the initial leakage of 1157 CFM was brought down to 38 CFM a reduction of 96.7%.

The initial apprehension of Mr.Chaddi, the Project Manager from Ali Mousa, was dismissed while seeing the computer screens and the confirmation by the TAB consultant with a retest.

“Seeing this technology work was like a miracle happening. It was straightforward precision and a non-intrusive process” he said.



### PROJECT OVERVIEW

**BUILDING**

Al Fattan Towers Downtown

**LOCATION**

Dubai, UAE

**AEROSEAL CONTRACTOR**

AirSeal Technical Services

**GENERAL CONTRACTOR**

Ali Mousa & Sons

**CONSULTANT**

AE 7

**GOAL**

Reduce leakage and pass inspection.

**BEFORE AEROSEAL**

91,604 CFM of leakage

**AFTER AEROSEAL**

4,580 CFM of leakage

**RESULTS**

Sealed ductwork with a 95% reduction of leakage in three weeks; Fixed air duct system to comply with HVAC system requirements and met code compliance.

## The Result

With consent to proceed Airseal Technical services team began sealing the 94 riser ducts in all three Towers. The results were so substantial that eventually all ducts passed the inspection reports and @87,000 CFM was sealed.

Aeroseal is a patented technology that injects a fog of aerosolized sealant particles into pressurized ductwork to seal air leaks from the inside. It relies on a computer-controlled system to continuously measure airflow and leakage throughout the sealing process. Sealant particles accumulate only where the leaks are located, gradually closing the leak. The system records results in real-time, stopping when the desired levels have been reached.



Our main goal along with Aeroseal is to bring impactful Energy savings to the build environment in the Middle East. Prevention and remedy for wasted energy in HVAC ductwork now has a solution available in the region.

**Gaurav Bhatnagar**  
*AirSeal Technical Services*



Solutions like Aeroseal are always a welcome. The hiccups caused by the leakages were pushing our project timelines, however we are glad to have found a great partner in Aeroseal and the AirSeal Team.

**Chaddi Semaan**  
*MEP Project Manager*  
*Ali Mousa & Sons*



We have our reputation and our commitment to the highest standards while executing our projects for our Clients. The Aeroseal approach is an innovative technological advantage to solve the air distribution losses which trouble everyone. The agility of the AirSeal team has gained our trust to consider in our future projects.

**Salim Sheikh**  
*MEP Operation Manager*  
*Ali Mousa & Sons*



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