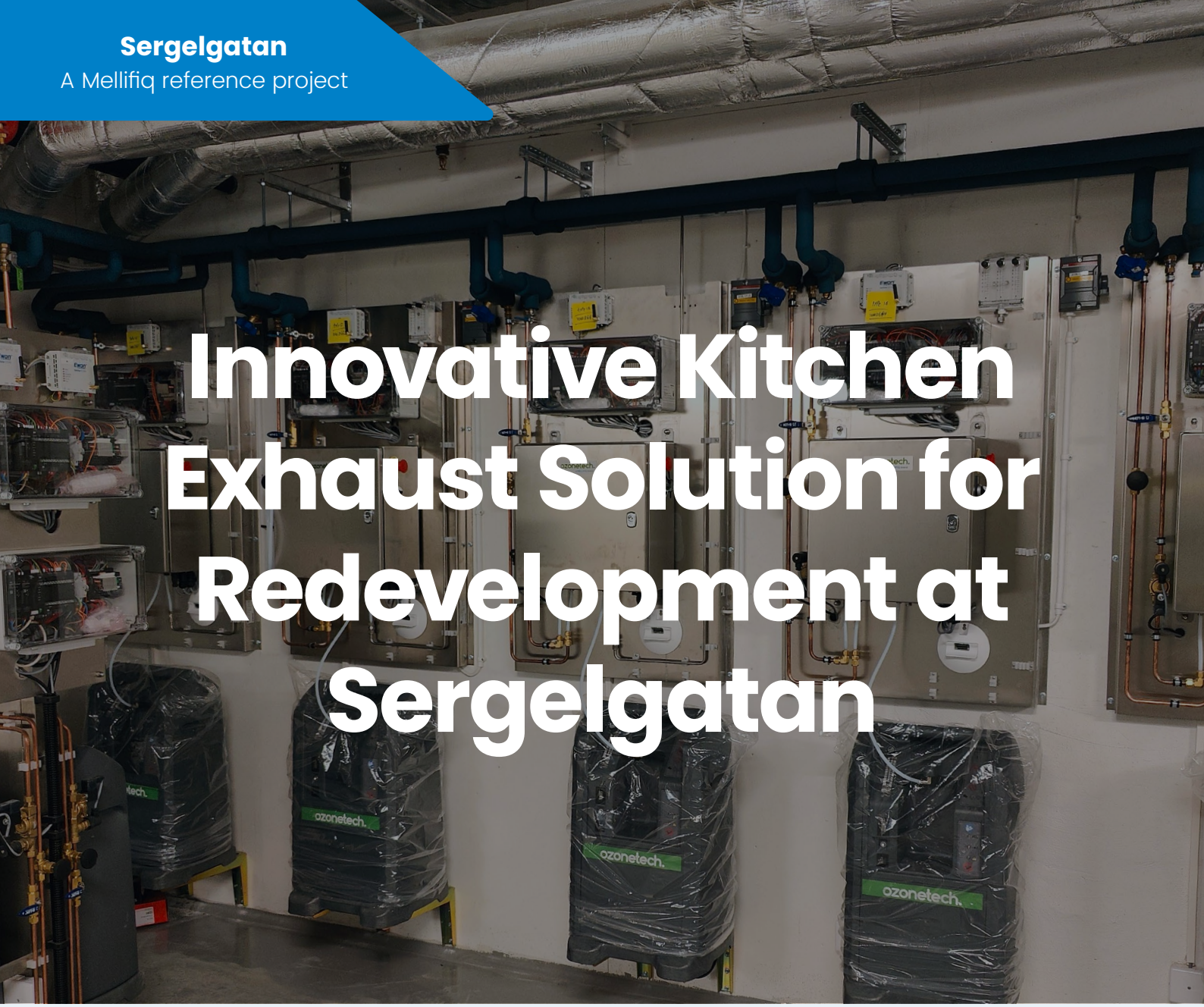
Sergelgatan
A Mellifiq reference project



Innovative Kitchen Exhaust Solution for Redevelopment at Sergelgatan

Energy-efficient exhaust treatment enhancing air quality and reducing heat costs

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Introduction

Our client in this project is one of Sweden's largest property owners, with a portfolio that includes prime real estate across major cities. Among its notable projects is the redevelopment of Sergelgatan, a central location in Stockholm known for its vibrant mix of retail, office, and restaurant spaces. The project aims to rejuvenate the area, offering modern commercial spaces while focusing on sustainability and energy efficiency.

Facts

Location:	Stockholm, Sweden
Application:	Kitchen Exhaust treatment and odor control
Industry	Real Estate

Solution:

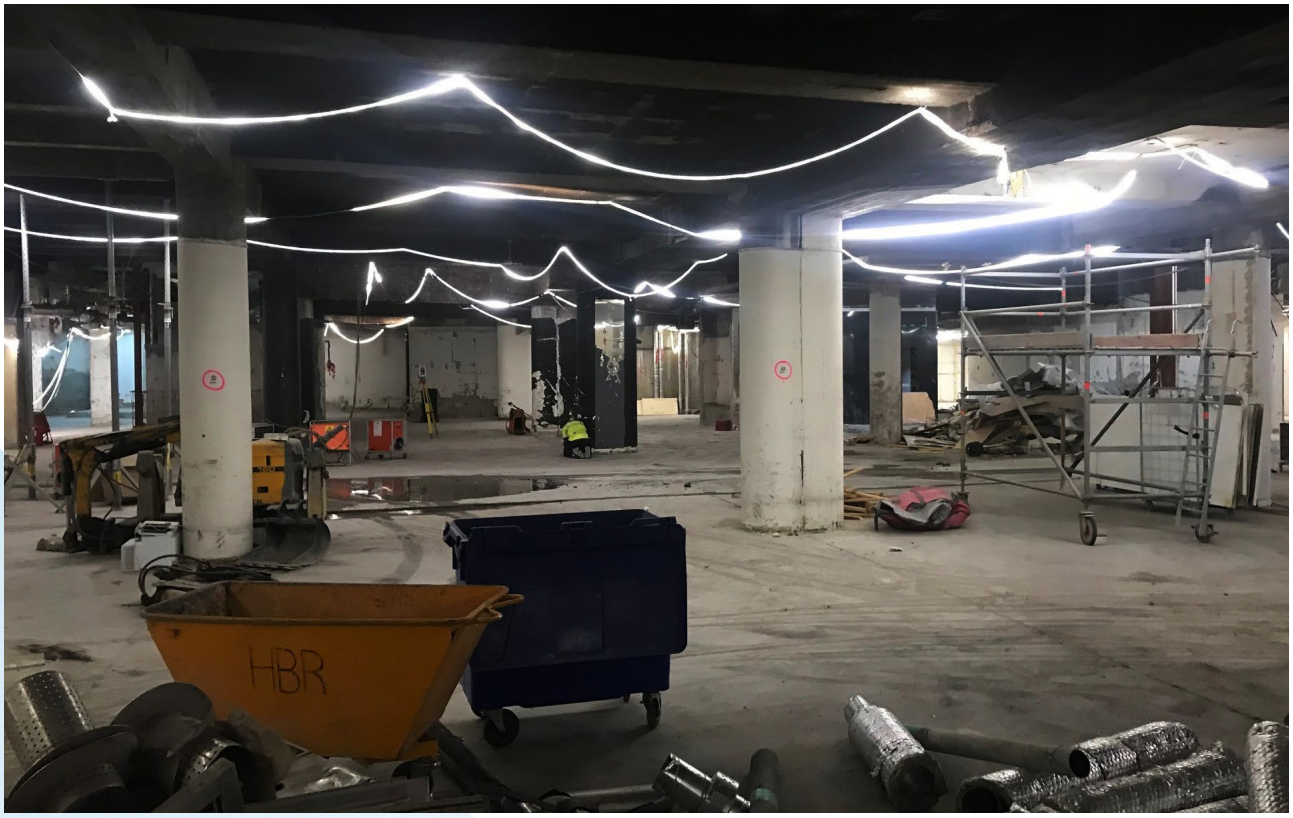
Mellifiq delivery:	Multiple RENA Kitchen Solutions – high-performance ozone systems encapsulated in acid-resistant stainless steel. Each unit is fully integrated with an O3Eye control box, ensuring safe and energy-efficient production of continuously high-concentration and pure ozone gas. Custom-designed Nodora X5000 units operate in parallel as the final polishing step, ensuring odor-free exhaust air.
Capacity:	18,000 l/s
Brands:	ozonetech. a MELLIFIQ brand Nodora a MELLIFIQ brand

The problem

As part of the transformation of Sergelgatan, the development includes a wide range of restaurants, each presenting its own unique challenges — particularly when it comes to managing kitchen exhaust air. Strict requirements are in place for air treatment of the kitchen exhaust to ensure that restaurant operations do not negatively impact the indoor or outdoor environment of surrounding properties.

To satisfy environmental standards and operational needs, the client required an advanced solution for managing commercial kitchen exhaust.

The solution had to effectively address critical concerns such as energy efficiency, indoor air quality, and minimizing heating costs when handling exhaust air from the commercial kitchens.



The air treatment systems are installed in the garage beneath the restaurants to treat the kitchen exhaust air and enhance overall air quality throughout the building.

The solution

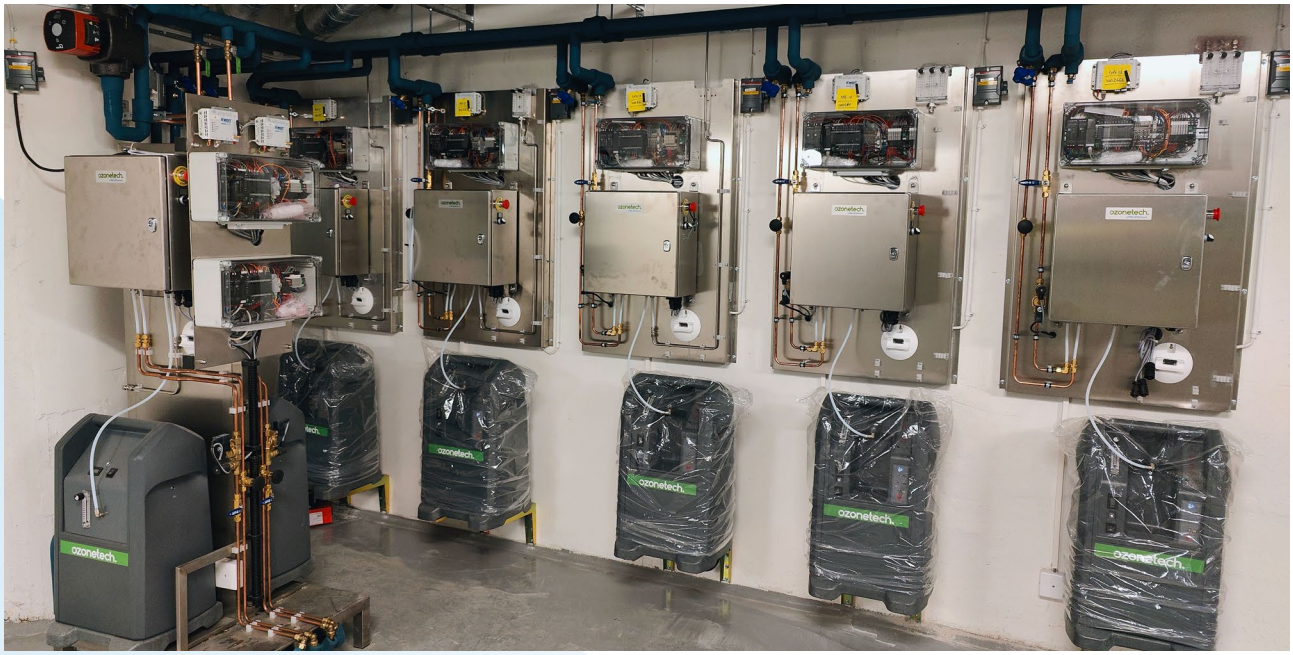
To meet the client's requirements, we developed a customized, high-performance air treatment solution that incorporates RENA Kitchen Solutions and Nodora X polishing filters. RENA Kitchen Solutions deliver a durable, energy-efficient system engineered to handle high-grease commercial kitchen exhaust while ensuring compliance with stringent safety and regulatory standards.

To address the diverse requirements across kitchen sizes and conditions, a tailored selection of RENA Kitchen Solutions units was implemented.

RENA 80 Kitchen Solutions: This high-capacity unit is designed to manage large air volumes while effectively treating grease, spices, and odor particles in the exhaust air. It is particularly suited for large kitchens where exhaust air carries high grease loads and humidity. A single RENA 80 Kitchen Solutions unit was installed to ensure optimal performance and full compliance with air quality standards in this demanding environment.

RENA 60 Kitchen Solutions: Installed across several restaurants, the RENA 60 Kitchen Solutions provides a balanced solution for medium-sized kitchens. It ensures effective grease removal and odor control, maintaining high indoor air quality while compromising safety and energy efficiency.

RENA 40 Kitchen Solutions: Designed for kitchens with lighter grease loads, the RENA 40 Kitchen Solutions efficiently treats exhaust air, preventing grease buildup in ducts. This treatment reduces fire risks, minimizes odor issues, and lowers maintenance needs. Additionally, it enhances energy recovery by reducing heat loss, contributing to overall energy efficiency.



The RENA Kitchen Solutions units are installed in the garage beneath the restaurant, managing all kitchen exhaust air from a single location.

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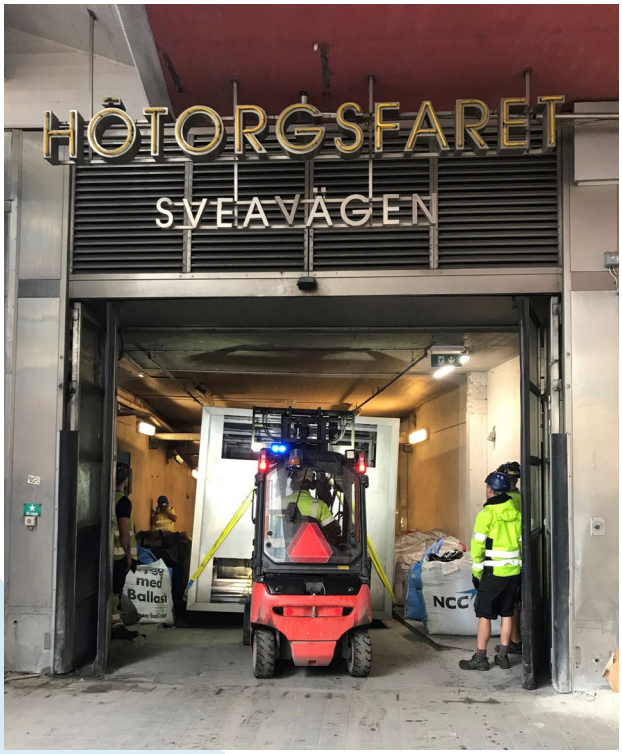
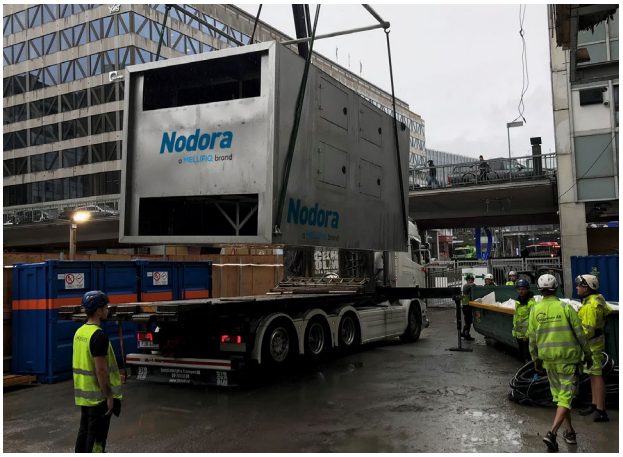
The Nodora X5000 units serve as high-performance polishing filters, capturing fine particulates and eliminating odors. In addition to enhancing the air quality the Nodora X 5000 improves energy efficiency by reducing heating demand in areas receiving hot, odor-free exhaust air. Designed for use in the building's basement and garage areas, these units ensure that the exhaust air released is clean and odor-free, preventing contamination or unpleasant smells from entering the ventilation system.

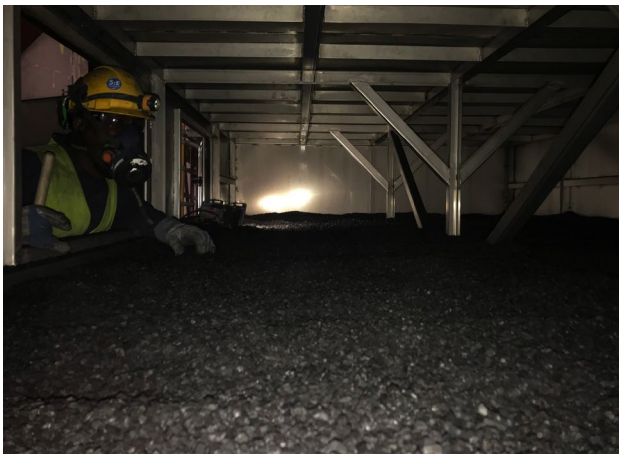
The Nodora X5000 units are designed to eliminate odor emissions from exhaust air, and with a capacity of 9,000 L/s per unit, the system is suitable for high-volume industrial and commercial applications.



The dimensions of the Nodora units were adapted to accommodate the garage entrance height.



Delivery of Nodora X5000 units to Sergelgatan, central Stockholm.



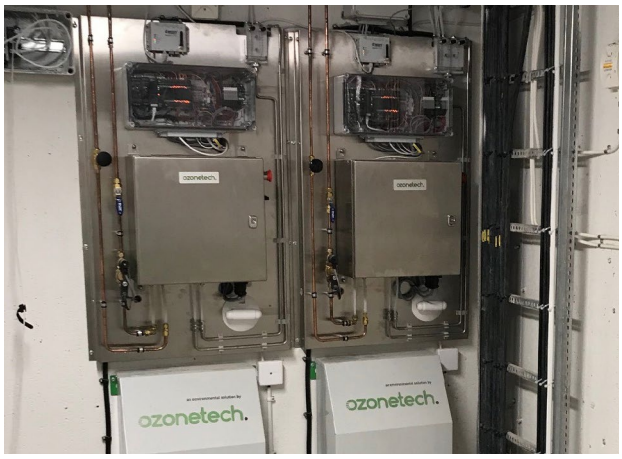
Pre-commissioning inspection of the Nodora X5000 dual-bed system with active media.

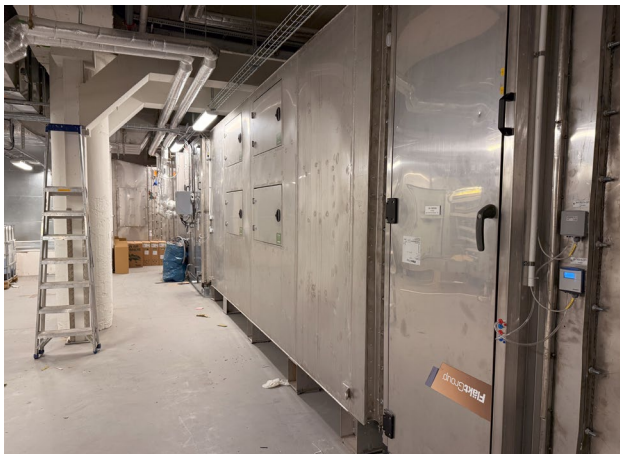
Evaluation

The Sergelgatan project represents an innovative example of how modern kitchen exhaust solutions can integrate seamlessly into large-scale commercial real estate developments.

Our tailored kitchen exhaust systems, featuring RENA Kitchen Solutions 80, 60, and 40 units along with Nodora X5000 polishing filters, provided our client with a comprehensive, energy-efficient solution that not only meets the practical needs of the restaurants but also supports the building's sustainability and operational efficiency goals. By addressing the critical factors of air quality, fire safety, and energy savings, the project enhances the overall functionality of the building while ensuring a comfortable and safe environment for both tenants and visitors.

This collaboration demonstrates the power of innovative air treatment systems in achieving a modern, sustainable urban development.





Key benefits of implementation

- **Energy Efficiency & Cost Reduction:** Recovers heat from exhaust air, reducing heating needs in the basement and garage, lowering energy use and costs.
- **Compliance with Safety Standards:** Advanced oxidation and adsorption meet the highest safety standards, preventing fire risks from kitchen exhaust in busy multi-tenant buildings. A crucial component in high-traffic areas such as Sergelgatan.
- **Improved Air Quality & Odor Control:** RENA and Nodora X systems clean kitchen exhaust air, removing grease, odors, and particles for cleaner air in restaurants and common areas.
- **Sustainability:** Supports our client's environmental goals by cutting energy use and emissions through heat recovery and efficient air treatment.

About Mellifiq

Mellifiq is a multi-awarded environmental service company group, that has since the early nineties evolved into a world leading system and solution provider with multiple groundbreaking applications for industrial, municipal, and real estate clients. We supply cutting-edge technologies to manage the most sophisticated air, water, and energy challenges.

Mellifiq offers a complete range of air and water treatment technologies and solutions across multiple industries such as processing industry, energy sector, food and beverage, pharmaceutical, wastewater treatment and commercial real estate.

Mellifiq offers strong and renowned brands, such as Ozonetech, Nodora, Water Maid, Saniray, Axolot and world-class engineering services combined an excellent track record of more than 40 years of innovation. We help our clients achieve the most efficient and sustainable solutions while creating the maximum value for their businesses.

With several business units across Europe, Mellifiq is headquartered in Stockholm where research and development, production, QA and certification all take place. Our unique technology and our extensive expertise have made us the Center of Excellence for the world's most complex projects, and a global player with installations on all six continents.

Everyday millions of people rely on our solutions for ventilation, disinfection, sanitation, and odor control. We are committed to raising the bar for the concept of clean and the industry standard for engineering, technical services and general contracting.

For additional information, visit our website at www.mellifiq.com

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