



HIGHMARK
BUILDING EFFICIENCY

SERVICE CASE STUDY

**Reinvented Aermec WWM
Modular Chiller Transforms NYC
Multifamily**

OVERVIEW

The conventional chiller installed at a high-rise multifamily condominium in Queens County, New York City had run the course of its useful life and it was time for a replacement. However, many challenges existed – such as limited space, budget and time – to achieve a successful installation of the new chiller. The HIGHMARK team analyzed the situation and knew the perfect solution: the [Aermec WWM Modular Chiller](#).

PROJECT SPECIFICATIONS

| | |
|---------------------|--|
| Application | High-rise multifamily residential building |
| Location | Queens County, New York City |
| Project type | Mechanical, Electrical, Engineering |
| Technologies | Aermec WWM Modular Chillers Space-efficient equipment Energy-efficient building management |
| Project size | 15 stories 59 residential units 3 commercial units 89,253 sq. ft. |
| Completion | 2019 |



The reinvented Aermec WWM Modular Chiller's compact footprint is perfect for New York City's buildings, which have limited interior space.

CHALLENGES

The challenges in this project were numerous, including:

- **Tight space:** In the multifamily building, there was no extra room to spare for the installation of the chiller. The equipment room was small, and to bring in a traditional chiller, major renovations would've been required, such as knocking down walls. This would be costly and time-consuming.
- **Limited budget:** The facility was running a tight budget and needed to have a financially suitable solution.
- **Quick installation:** With so many residential units, the facility couldn't be without a chiller for a long period of time.
- **Sustainability concerns:** The building owners wanted to upgrade the chiller with a new one that was better for the environment.



One of the main challenges was the limited space. A conventional chiller couldn't enter without knocking down walls. That's why the Aermec WWM Modular Chiller was selected since it fits through tight spaces with ease.

SOLUTION

The **Aermec WWM Modular Chiller** 0500 (30 tons) was identified as the best technology for this project. The HIGHMARK team had worked with Aermec to reinvent the WWM to be tailored to the exact needs of New York City's buildings. Consequently, eight WWM units were incorporated to overcome the specific challenges of the building.

The reinvented Aermec WWM Modular Chiller was the perfect solution for the job for the following reasons:

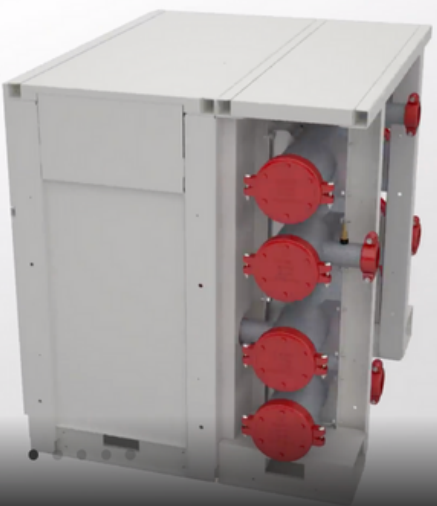
- Installation is simple and quick in tight spaces since the units fit through standard-sized doors and into normal elevators
- The unit takes up less total-installed space because it's compact and only a single module is needed for redundancy purposes
- Money is saved on installation since the building infrastructure is kept in place
- The WWM is one of the most energy-efficient chillers on the market today
- Sustainability is maximized, thus supporting the environment
- Multiple configurations are offered to fit within the spaces allowed

RELIABLE and MODULAR

EASY and QUICK to INSTALL

UP to 32 CONNECTABLE UNITS


MAX 2 LEVELS of STACKABLE UNITS



The Aermec WWM Modular Chiller offers many features and benefits.

IN LINE

*n. 1 Multichiller EVO
max n. 8 WWM units*



Listed above are just a few of the many configuration options offered by the Aermec WWM Modular Chiller.

RESULTS

The Aermec WWM 30-ton modular chiller was the perfect solution for the challenges faced by this multifamily residential building. The WWM was able to overcome the many issues faced and achieve the following results:

- **Entered easily into the building:** All eight WWM modules fit through doors and elevators to get into the equipment room. Due to its modular flexibility, the installed system was able to be customized to the existing space.
- **Reduced installation and equipment costs:** By eliminating the need for wall demolition and reconstruction, the total-installed costs of the WWM were much lower than those of a conventional chiller system.
- **Limited impact on residents:** With a quick installation and startup, the residents of the multifamily building felt little interruption in their services.
- **Provided a sustainable system:** With high-efficiency scroll compressors, sustainable refrigerants and plate-type heat exchangers, the WWM 0500 is a highly efficient system. It helped the building exceed ASHRAE 90.1 energy-code efficiency standards, while being in compliance with New York City's strict environmental regulations. For this reason, the Aermec WWM provides key support to sustainability, electrification and decarbonization efforts.



The Aermec WWM Modular Chiller units were placed side-by-side and stacked to fit within the equipment room's limited space.

HIGHMARK HVAC Service & Maintenance

To ensure your building is achieving peak performance, contact HIGHMARK's HVAC Service and Maintenance team today.

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