



## Project Profile 24 2<sup>nd</sup> Avenue, Manhattan – NY, USA

### DELTA®-VENT SA

#### Building Longevity in the City that Never Sleeps



24 2<sup>nd</sup> Avenue needed an advanced weather-resistive barrier that contributes to a high-performing, energy-efficient building

#### → Project Description

Located in the East Village of Manhattan, 24 2<sup>nd</sup> Avenue is a mixed-use condominium project that stands 120 ft. tall, sitting on 70,750 sq. ft. of land. It comprises 52,700 sq. ft. of residential space and 6,000 sq. ft. of commercial, retail space on the ground floor. The building features 31 condos, averaging 1,700 sq. ft. each, with attractive views of the nearby Sara D. Roosevelt Park across East Houston Street.

The developer for 24 2<sup>nd</sup> Avenue was AORE Capital, and the architects were Combined Architecture. When it came to effective weather protection, the entire team knew they needed a weather-resistive barrier that would not only protect against moisture-related issues over the long term, but also contribute to a high-performing building overall. Matt Capone of Façades X, a company that provides envelope solutions, including materials and consultation services, recommended Dörken Systems Inc. as the ideal provider of advanced air and moisture barriers for this project.

#### The 24 2<sup>nd</sup> Avenue Project – Building to Higher Standards

Performance standards have been increasing for all construction types in the city of New York, including the implementation of new energy-consumption guidelines (for example, the 2016 NYC Energy Conservation Code). This is good news for occupants and building owners looking to maintain energy-efficient buildings, but does require special considerations for teams building to these new standards – especially when it comes to material selection and construction process. For the 24 2<sup>nd</sup> Avenue project team, using products like DELTA®-VENT SA helped contribute to the development of a high-performance building with the potential for energy efficiency and long-term sustainability benefits.

#### → General Information

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|--|---|
| <b>Building Name</b>                     | 24 2 <sup>nd</sup> Avenue   |
| <b>Building Location</b>                 | East Manhattan, New York  |
| <b>Country</b>                           | USA   |
| <b>Project Size</b>                      | 70,750 sq. ft.  |
| <b>Building Type</b>                     | Condos with commercial, retail space on ground floor                |
| <b>Project Type</b>                      | Mixed-use condominium   |
| <b>Developer</b>                         | AORE Capital  |
| <b>Building Facade</b>                   | Combination of stone and Aluminum Composite Material (ACM) cladding |
| <b>Cost</b>                              | \$32,000,000  |
| <b>Architect</b>                         | Combined Architecture   |
| <b>Consultant</b>                        | Façades X   |
| <b>Sub-Contractor for DELTA® Product</b> | Lavada Inc.   |



Airtightness is critical for building performance and occupant comfort, and an important component when considering energy efficiency

## DELTA®-VENT SA — The High-performance Solution for the Job

The façade of 24 2<sup>nd</sup> Avenue is a combination of stone and Aluminum Composite Material (ACM) cladding. Underneath these claddings, the building is almost entirely wrapped in Dörken's DELTA®-VENT SA.

Selecting the right materials is critical for achieving a high-performance building. What made DELTA®-VENT SA the perfect solution for the team at 24 2<sup>nd</sup> Avenue is its ability to be

water, air, and weather tight, all while staying highly vapor permeable. Airtightness is critical for building performance and occupant comfort, and an important component when considering energy efficiency. DELTA®-VENT SA keeps buildings airtight and improves the performance of the wall system by adhering directly to the substrate. By eliminating the use of fasteners and penetrations, fully adhered membranes are less

prone to air and moisture leaks that are common with other types of barriers.

On top of this, Dörken's DELTA®-VENT SA works to prevent moisture from getting into buildings, while simultaneously allowing moisture that is already within the walls to escape—therefore eliminating the risk of mold and other problems caused by water pooling where it should not.



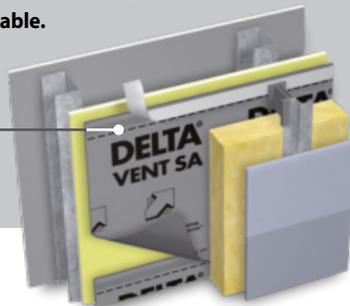
DELTA®-VENT SA contributed to developing a high-performance building that is energy efficient and has long-term sustainability benefits

### Getting Ahead of Moisture-related Issues

Increasingly, architects and builders are realizing the importance of a high-performing air and moisture barrier – which works to maximize the effectiveness of a building's insulation, helping reduce overall costs and avoid moisture-related issues. This is where DELTA®-VENT SA shines, helping architects and builders accomplish their biggest building-performance goals.

**DELTA®-VENT SA meets the most stringent airtightness requirements when tested by ASTM E2357 (Air Barrier Assembly Test), and is included in NFPA 285 compliant walls and assemblies, Red List Compliant (DECLARE), with Health Product Declaration® (HPD 2.0) available.**

DELTA®-VENT SA



### Installing DELTA®-VENT SA – A Smooth Success

Lavada Inc., a construction company that has built almost 200 projects since its inception in 2007, was responsible for installing DELTA®-VENT SA. Prior to installing the product, they ran a mock-up of the installation as a safeguard to make sure that the right steps would be followed closely.

As far as the air and moisture barrier was concerned, the biggest challenge for the Lavada team was the critical transition from the sheathing to concrete. However, the team found that DELTA®-VENT SA was easily able to make that transition. Without having a break and a joint, they were able to seal across both sides without any concerns, ensuring the air barrier remained continuous with no risky complex details.