



RBC Gateway High-Rise Apartments

Installing top-of-the-line soundproofing on mechanical systems for high-end residences.

Insulation Midwest Inc. recently won a bid to work on RBC Gateway, a mixed-use construction project in downtown Minneapolis. The city's downtown area is currently booming. Downtown Minneapolis added 1,500 new apartment units in 2021 and topped \$1 billion in new construction permits for the tenth straight year. When the project is finished, RBC Gateway will be one of the 10 tallest buildings in downtown Minneapolis. It includes commercial space, office space and single-family residences.

CHALLENGE

Greg Newman, Vice President of Insulation Midwest Inc., bid on the mechanical soundproofing work for floors 31 through 35 of the RBC Gateway building. These floors were designated for high-end single-family residences, so the soundproofing needed to be top-notch. Residents paying more than \$1 million for a luxury residence don't want to be disturbed by pipe noises such as rain water draining from the roof or toilets flushing in an adjacent unit. So Newman needed to install proper pipe insulation to reduce any potential noise associated with the building's pipe systems to ensure that the owners of the units would be satisfied.

INSULATION MIDWEST INC.

Insulation Midwest Inc. is a design build insulation contractor headquartered in St. Paul, MN. The company has decades of experience with soundproofing and pipe insulation work. "We worked on Tate Laboratory of Physics as well as the Northrop Auditorium at the University of Minnesota," says Newman. The company has also worked for organizations such as the FBI and Department of Homeland Security, insulating all of the pipes in rooms where it's essential that the privacy of the occupants is protected.

PRODUCT

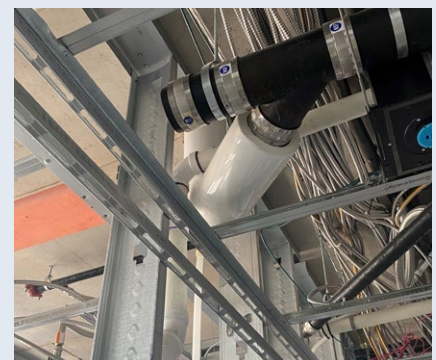
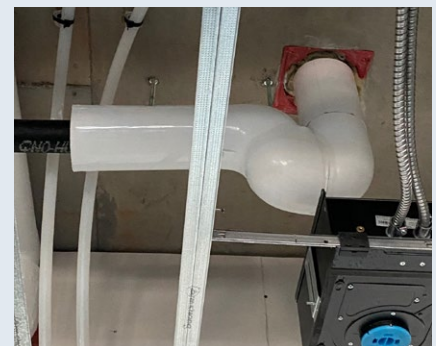
Micro-Lok® HP, Zeston® PVC,
Mass Loaded Vinyl

INSTALLER

Insulation Midwest Inc.,
St. Paul, Minnesota

DEVELOPER

McGough, St. Paul, Minnesota



SOLUTION

Newman used multiple insulation systems for the RBC Gateway project. For the P-traps under the kitchen and bathroom sinks, Newman insulated the pipes with 1-inch **Micro-Lok® HP** fiberglass pipe insulation and then covered that with **Johns Manville Zeston® PVC**. Recent research has shown that JM's Micro-Lok® HP Fiberglass insulation is highly effective in mitigating higher frequency noises, such as the noise from pipes. The addition of the Zeston® PVC jacketing further improves performance.

For the wastewater pipes, Newman incorporated not only **Micro-Lok® HP** fiberglass pipe insulation and **Zeston® PVC** jacketing, but also **Johns Manville Mass Loaded Vinyl**. "We chose to use the Mass Loaded Vinyl for areas like living rooms and bedrooms, where residents need quiet to watch TV, listen to music or sleep," says Newman. Johns Manville research scientists have determined that lagging systems with mass-loaded vinyl can provide noise reduction between 10 and 40 dB depending on the frequency,¹ which can provide substantial mitigation of noise.

Newman advises anyone designing a pipe system for any type of residence consider acoustics from the start of the project. This is because it's much more expensive to go back and add soundproofing insulation later on in the building process than it is to include it in the design from the start. With more people working from home, home buyers are looking for better acoustic control in their homes. "It's not always about the dollar," Newman says. "You have to do soundproofing right."

Newman uses Johns Manville products because of the productive working relationship that he has had with JM over the years. "The thing I like about JM is that they are willing to work with me on new products and design new products that we need out in this industry. "They listen to what we have to say."

LEARN MORE

To learn more about the importance of acoustics in piping systems, visit the JM acoustics resource page at www.jm.com/en/mechanical/acoustics.

