

Quiet® Success Story
Multifamily Residential

Location

Calgary, AB, Canada

Architect

Casola Koppe Architects

Construction Manager

Kanas Corporation

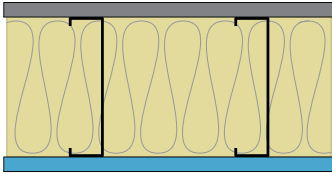
Distributor

Pacific West Systems Supply, Ltd.

Products

QuietRock® ES Mold Resistant

Solution Assembly Details



- 5/8" Type X
- 6" 18 mil (25 ga), 24" o.c.
- Mineral Wool Insulation (R22.5)
- QR ESMR (5/8" Type X)

QuietRock®

Affordable. Sustainable. Quiet®.

Orion at Lumino Park offers Calgary renters innovative, affordable and sustainable apartments.

Project Summary

Orion at Lumino Park is a 135 unit, 18-story multi-family high-rise located in Calgary, Alberta, Canada. [Kanas Corporation](#) is the project owner, developer and construction manager for the 100,000 square foot rental property.

Orion is an affordable rental property offering rental rates at 10% below market value. What is unusual is that tenants are not short on amenities. Renters enjoy comfortable high-tech, high-quality apartments with low operating costs – at a manageable monthly rate.

Using ICF (insulated concrete form) construction, cast-in-place concrete walls were sandwiched between insulation material layers to create thicker-than traditional exterior walls. "ICF is unusual in the rental world, especially going up 18 stories," says Jason Whitfield, General Manager for Kanas Corporation. "This was part of our energy performance objective—creating a super-insulated building." The energy performance of the ICF building envelope, combined with the superior mechanical and electrical systems, lowers energy costs by more than 50% compared to a typical building.

Kanas chose QuietRock® Sound Reducing Drywall by PABCO® Gypsum for the interior walls between apartments and the corridors. "With QuietRock®, we wanted to continue to move the needle on the quality of the building by providing a quieter experience for tenants," says Whitfield.

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– Jason Whitfield, General Manager, Kanas Corporation





Orion at Lumino Park exterior.



Pacific West Supply delivering QuietRock® for the project.

Innovative Approach to Sound

With sound control a key objective, the PABCO® technical team worked together with Kanas and the architect on the best solution to cost-effectively meet acoustic comfort goals. PABCO® conducted several lab and field tests looking at various wall assemblies such as double layers of Type X on both sides, 1 and 2 layers of Type X with 1 layer of QuietRock® and several others.

PABCO® also tested the wall assemblies of [Kanas' past construction projects](#). This helped improve the design of Orion. Specifically, Kanas moved from a four-layer Type X wall assembly to a two-layer assembly with Type X on one side, QuietRock® on the other.

"After evaluating different types of walls, we chose the QuietRock® assembly, confident it would deliver a reduced noise transmission experience for tenants", says Whitfield. He continues, "The approach complemented the way we insulated the apartments against exterior noise, using ICF for the exterior walls."

Using QuietRock® Sound Reducing Drywall saved material costs. Plus, it increased floor space by eliminating two of the four layers of drywall. And, it still achieved the STC performance required. Further, the patented EZ-Snap® Technology made installation easier, saving labor time and decreasing jobsite waste (QuietRock® ES easily scores and snaps just like standard gypsum panels.)

Sustainability Key

With QuietRock®, less drywall was used than would otherwise have been used in a multi-layer assembly; therefore, the carbon footprint of the QuietRock® assembly is approximately half that of traditional assemblies. And since QuietRock® ES starts as a single piece of drywall, unlike other Constrained Layer Damped panels, its embodied energy is half that of other CLD panels.

"We're seeing a lot more QuietRock® being specified," says Jeff Krippel, Outside Sales, Pacific West Systems Supply, Ltd, Calgary, who provided the sound reducing drywall for the project. "We're actually pushing more QuietRock® than SilentFX® for many reasons—consistent offerings, better service, its mold resistance, and we're hearing from customers that it cuts really nicely."

With Kanas' innovative approach to construction, including its use of QuietRock, they were able to achieve an environmentally sustainable property over the long term, a key objective for the Orion property. This longevity goal extended to the use of durable materials that could stand the test of time, including granite or quartz countertops in each of the apartments.



Chef's Kitchen in apartment unit



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About Kanas Corporation

Kanas Corporation, founded in 1996, utilizes innovative methods and materials to ensure comfortable, durable and environmentally sustainable buildings with low operating costs. Kanas is known for progressive approaches, such as insulated concrete forms, high fly-ash content concrete, co-generation units, solar energy, triple pane windows, and more. Kanas has the ability to design, develop and manage affordable rental housing and incorporate a triple bottom line philosophy of social, economic and environmental stewardship.

About QuietRock®

QuietRock® by PABCO® Gypsum, the first and most technically advanced sound reducing drywall, was developed in 2003 using modern chemistries, techniques and a Silicon Valley approach to building science. Through continued innovation, including the patented EZ-Snap® Technology, QuietRock® Sound Reducing Drywall is a cost effective alternative to conventional approaches for building acoustically rated walls.



Drywall contractor lining up QuietRock CLD panel for installation.



Luxury interior of Quiet® living room



QuietRock EZ-SNAP Mold Resistant panel installed on steel framing.

Call 1-800-797-8159

to consult with us on your particular acoustical requirements.

www.QuietRock.com