

SLIMDUCT™ RD

Snow proof VRF Lineset Protection

Quincy Junior/Senior High School, located in Plumas County, has been serving the local community for over one century. During all these years, the school went through a number of improvements to provide its students with a comfortable learning environment.

One of the latest improvements, was the complete overhaul of their oil heating system, and the installation of a new HVAC system, which provides both heating and cooling to the classrooms, and common areas throughout the school.

Project Info

- Location: Quincy, CA
- Building type: School
- Project type: Existing building, retrofit
- Mini-split manufacturer: Mitsubishi Electric Trane
- Mechanical contractor: Ray-Mac Mechanical, Inc
- Master distributor in North America for Slimduct RD/PD: MarketAir



Installation in Quincy, CA

Ray-Mac Mechanical, Inc, a leader of HVAC services for the California North State, was awarded this project. David McDowell, commercial estimator and design build project lead for this job said: "The school was looking at getting off their oil heating system and adding air conditioning." After an in-depth analysis of the alternatives for cooling and heating available, it was decided that using Mitsubishi City Multi VRF systems was the way to go.

During a campus walk through, it was determined that the refrigerant piping had to be routed on the roof of one of the buildings. The engineer had the details to spec custom engineered sheet metal covers to encase the linesets. However, considering the snow environment, this wouldn't be the best solution.

After searching for the right alternative, they came across the Slimduct RD, which ended up being specified on this project. Gerry Spanger, CEO of Maketair and distributor of RD in North America, visited the site, and assisted with hands on measurements. Gerry came up with a layout and provided a full materials list needed for this project.

Slimduct RD is a heavy-duty metal duct system made of zinc, aluminum and magnesium. It offers superior resistance over stainless steel in snow environments and even in highly corrosive atmospheres such as sea air. More than that, the RD features a beautiful finish. "(the RD) has a much more architectural aesthetics view to it than the typical square boxy sheet metal covers we use." said David.

Brad Smith, Ray-Mac's superintendent at the Quincy project was very happy with the whole process. "The RD was great to work with. It came together 3 to 4 times faster than it typically would. The way it was shipped to us, it was already pre-assembled, so it took out a lot of the assembly out of the way. Making the job a lot smoother and faster."



RD installed at the school's wall

"The RD has my 100% support. We enjoyed working with it, it turned out quickly, and it's very durable. It held up very well through weather and snow, and it should hold up for many years to come." Brad added.

A total of 15 VRF units were installed. Each VRF system ran to the interior/exterior branch boxes and then dispersed out to the individual indoor units. This particular job required the use of ceiling cassettes, wall mounted units and even multi-position ducted air handling units.

The Quincy Junior/High-School students and staff are enjoying proper temperature control, and also benefiting from the indoor air quality provided by the newly installed VRF system.

Slimduct RD Benefits

- Protects the linesets from mechanical and weather damage
- Preserves the energy efficiency of the air conditioning system
- Multiple fittings available for easy on-site customization
- Scratch and abrasion resistant
- Optional anti-slip Walkway surface allows workers to walk on the cover for easy access and maintenance
- Compact design uses less space than conventional racking systems
- Professional and stylish finish
- Enhances the appearance of the entire installation

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