



June 2012

Frequently Asked Questions

Premium Rooftop Unit (RTU) Retrofit Emerging Technology Field Test

General Questions

Why Premium RTU Retrofits?

There are over 400,000 rooftop units in the Pacific Northwest, and Premium RTU Retrofit electrical savings can be up to 40 percent, representing 9 aMW of regional, potential savings. They are one of the few repeatable, commercial measures with significant savings potential.

What is a Premium RTU Retrofit?

Premium RTU Retrofits start by changing the RTU supply fan operation, by cycling the fan, installing a multi-speed fan motor or installing a Variable Speed Drive. Premium RTU Retrofits also include demand controlled ventilation (DCV) and advanced economizer control. DCV matches the amount of ventilation to the actual occupancy, while advanced economizer control optimizes the use of fresh, outside air, replacing mechanical cooling and improving indoor air quality.

What are good Premium RTU Retrofit applications?

Buildings with long hours of occupancy, lots of people, and varying levels of occupancy are good applications for Premium RTU Retrofits. Also, buildings with electric heat and large cooling loads will save more electricity. Finally, buildings without energy management systems are good candidates, because they aren't usually controlled very tightly, resulting in more opportunity for savings.

Are RTUs with gas-heat eligible for the Premium RTU Retrofit Emerging Technology Field Test?

Yes; since most of the Premium RTU Retrofit savings are from reducing fan and mechanical cooling energy use, RTUs with gas-heat are included in the Premium RTU Retrofit Emerging Technology Field Test

Are heat pump RTUs or RTUs with electric-heat eligible for the Premium RTU Retrofit Emerging Technology Field Test?

Yes; the Premium RTU Retrofit electricity savings will be higher than RTUs with gas-heat, so these units are preferred.

What is the typical cost for Premium RTU Retrofits?

Premium RTU Retrofits cost between \$3,000 and \$20,000, depending on provider and RTU size.

