

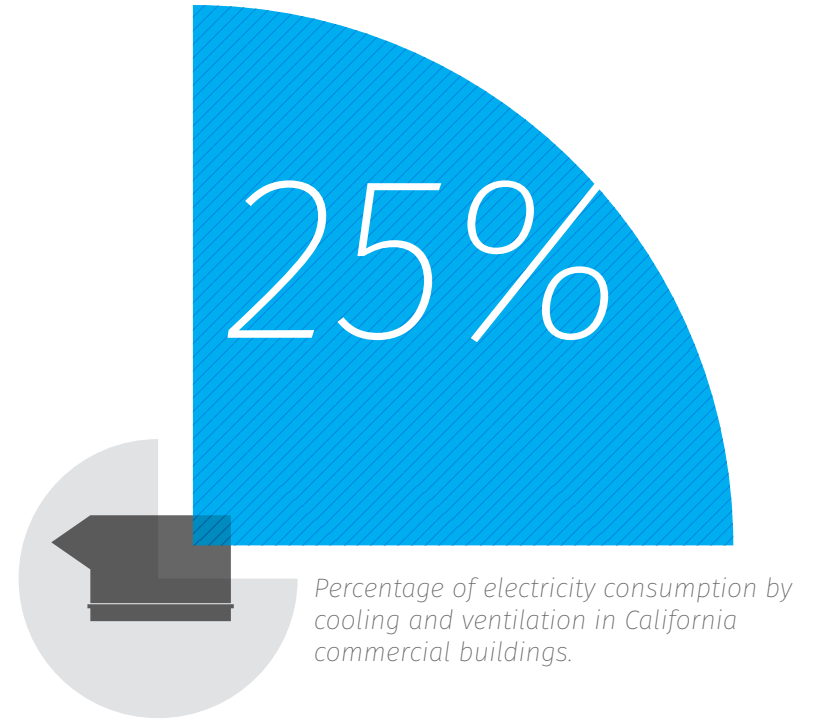


DualCool

Save energy and maintain comfort
add DualCool to your Rooftop HVAC Units.

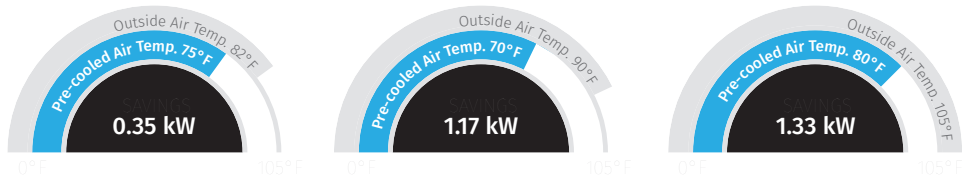
DualCool reduces cooling energy use by up to 40%.

Rooftop HVAC Units are essential to your building comfort. Unfortunately, in hot dry climates, they aren't as efficient as they could be. That's why we invented DualCool. DualCool is a retrofit for your Rooftop HVAC Unit that can save you up to 35% on cooling energy and up to 40% during peak demand hours.



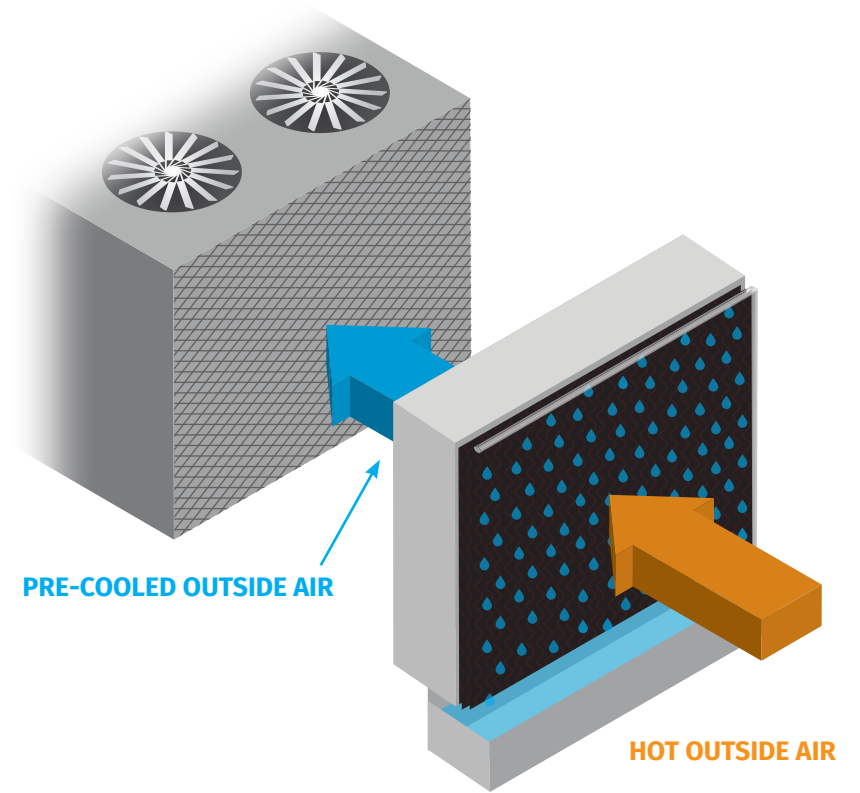
1. Evaporative Condenser pre-cools condenser air

Your condenser is the transport for all the heat generated by cooling your building. One or more fans work to dump the heat from the condenser to the outside environment. This workload is very energy intensive, especially when the outdoor environment is already hot. By pre-cooling the condenser air and lowering the condensing temperature, you reduce the workload and save energy.

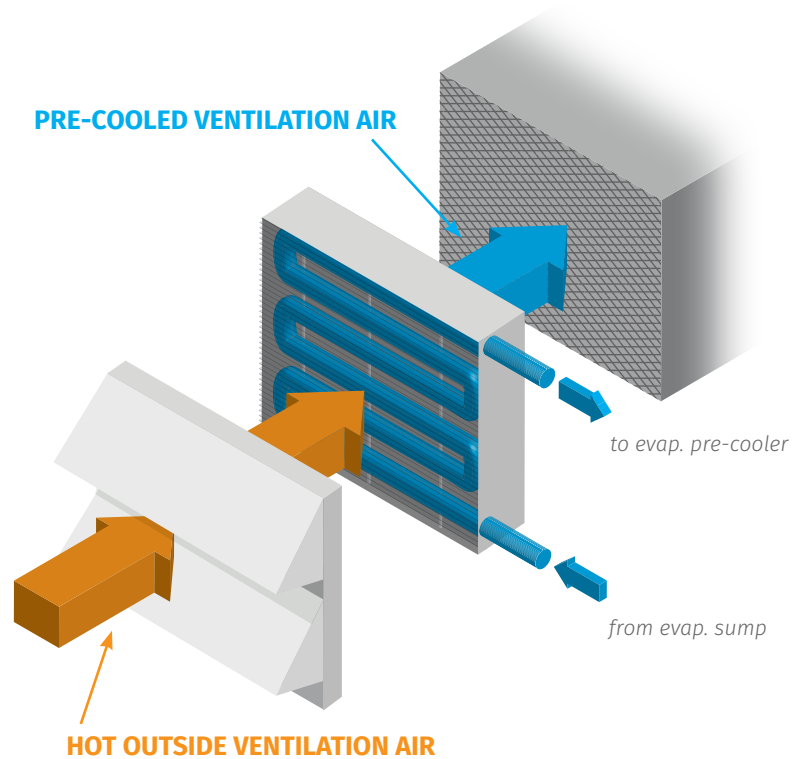


PG&E Lab Test Results July 2014

CONDENSER SIDE OF A ROOFTOP UNIT



EVAPORATOR SIDE OF A ROOFTOP UNIT



2. Water coil pre-cools ventilation air

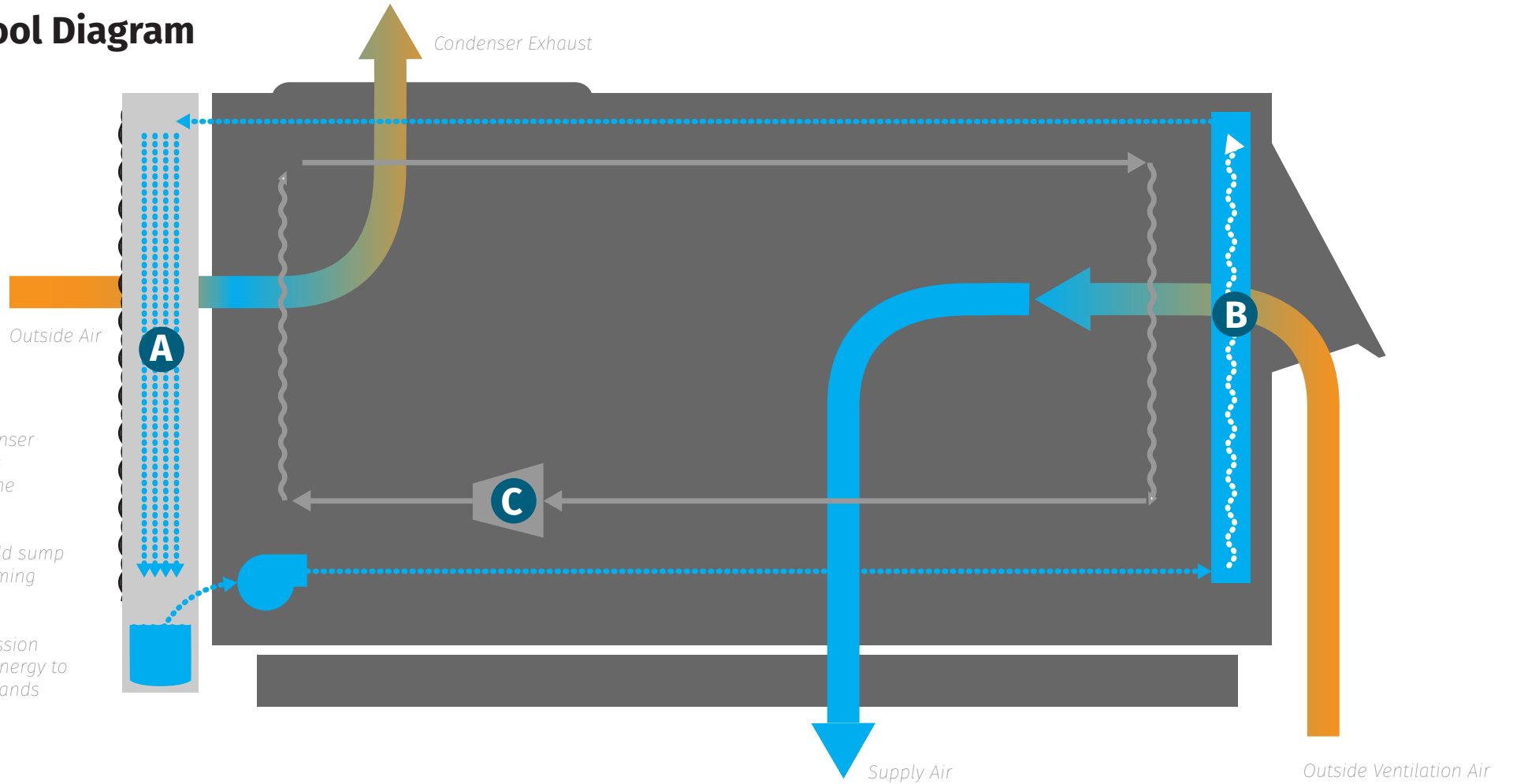
All commercial buildings require ventilation to maintain healthy air quality levels. Ventilation air is usually supplied through the rooftop units, significantly increasing cooling loads in warm weather. The DualCool water coil reduces the ventilation air temperature before it goes into the building. This reduces the extra load added from ventilation air, thus saving energy.

Even more energy savings.

Both of these energy-saving methods also effectively increase the cooling capacity of your rooftop unit. Your system will not need to run at 100% output as often and thus, the cooling demand can be satisfied at reduced fan speeds, and part-load compressor operation. Reducing fan speeds and reducing compressor run-time can significantly reduce energy use.



The DualCool Diagram



- A.** *Evaporative Condenser*
Pre-cooler reduces the workload for the compressor
- B.** *Water Coil* uses cold sump water to cool incoming ventilation air
- C.** *The vapor compression system* uses less energy to meet comfort demands

DualCool offers you practical energy savings and delivers an impressive ROI.

By practical we mean the DualCool will pay you back sooner rather than later. Take a look at these real world results, we think you'll agree that a DualCool retrofit is a great energy saving investment.

Typical 2014 DualCool Project Economics

	10-Ton	20-Ton	40-Ton	90-Ton
Customer 1 unit, installed	\$8,000	\$11,500	\$16,250	\$21,375
Customer 5 units, installed (per unit)	\$6,680	\$9,520	\$13,280	\$16,920
Customer 20 units, installed (per unit)	\$5,900	\$8,350	\$11,525	\$14,288

Payback (in years at \$0.20/kWh savings)

1 unit installed	10-Ton	20-Ton	40-Ton	90-Ton
Retail 24/7	4.7	3.4	2.4	1.4
Retail 16/7	6.1	4.4	3.1	1.8
Office/School 11/5	8.8	6.3	4.5	2.6
5 units installed				
Retail 24/7	3.9	2.8	2.0	1.1
Retail 16/7	5.1	3.7	2.5	1.4
Office/School 11/5	7.3	5.2	3.6	2.1
20 units installed				
Retail 24/7	3.5	2.5	1.7	0.9
Retail 16/7	4.5	3.2	2.2	1.2
Office/School 11/5	6.5	4.6	3.2	1.7

- NOTES:**
- Assumes 35% outdoor air
 - Performance varies with unit design and refrigerant
 - Assumes utility incentive of \$200 per kW saved
 - Costs vary with specific RTU design
 - Installed price includes water supply and 2 year service & warranty package
 - Based on CA, Valley Climate Zone



Peace of Mind with Comprehensive Care and Realtime Management

Maximize the savings from your DualCool with ICI's service and monitoring solutions. Our seasonal service plans provide 3 proactive maintenance visits to ensure maximum productivity. And our enhanced fault detection and monitoring provide realtime alerts and analytics.

**Contact us now and start
saving energy.**

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