#### Portland, OR

# LAW FIRM REDUCES THE EUI OF THEIR HVAC BY 71%



# Dramatic reduction in energy consumption saves money and allows for promotion of environmental stewardship.

A law practice created new offices by remodeling an old 1909 historic warehouse. The replacement of the HVAC system involved removing nine aging rooftop packaged units and replacing them with four Ventacity VS1000 Heat Recovery Ventilators (HRVs) and one VRF system. Lighting, windows and the building envelope were also improved and upgraded. The energy use index (EUI) of the office building dropped from 57.4 to 19.4 kBTU / ft² / year. Specifically the HVAC portion of the EUI draped by nearly 71%. These kind of dramatic improvements are possible because HVAC is typically the single greatest energy user in an office, and combining a very highly efficient HRV with a VRF heating and cooling system is currently the most energy efficiency type of HVAC system.

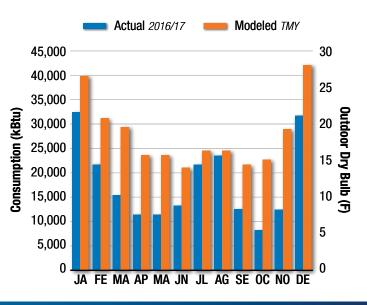
BEFORE		AFTER	
	Old RTUs	After VRF + HRV Solution Upgrade	
Equipment	9	1	4
Tons Heating	43	18	
Tons Cooling	35	16	
HVAC EUI (kBtu/ft²/yr)	60*	14.6	
*New RTUs are estimated at least 20% more efficient for analysis purposes		At least 71% HVAC energy reduction from former equipment	

## BUILDING FACTS

Building Construction Year	1909	
Occupancy Type	Office	
Number of Stories	2	
Conditioned Area	12,000 ft <sup>2</sup>	
Ownership	Private	
Existing HVAC System Types	9 RTU's (Eight 4-Ton, One 3-Ton) Gas and Electric	
New System	<ul><li>(1) Mitsubishi VRF System</li><li>(4) Ventacity Systems VS1000 RT Ventilator</li></ul>	

CASE SILLEY OFFICES

### ENERGY USE (MODELED & ACTUAL)





2828 SW Corbett Ave, Suite 119 Portland, OR 97201 1-888-VENTIL8 (888-836-8458) ventacity.com