

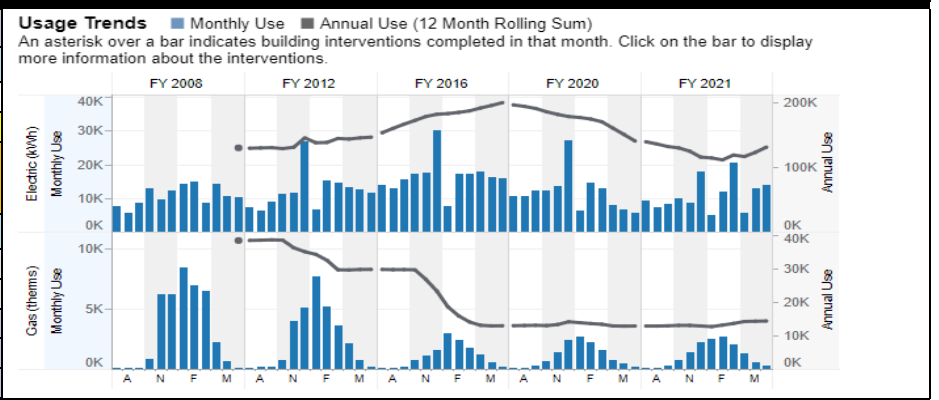


Photo by Paul Franz

Building Dashboard

Four Corners Elementary		21 Ferrante Ave				
Building Data						
Structural Details		HVAC		Condition	Appliances/equipment	
Year Built	1955; additional wings added in 1991	Heating System	Gas-fired hot water boiler (2011) Mini-split in mushroom (2010), HV units in gym (1991), New Rooftop Units (2) 2019	Excellent	Interior Lighting	all upgraded to LEDs 2018
Square footage	37,439					
Envelope	Concrete foundation walls, 10" brick with furred and plaster interior surface, mushroom has metal exterior	Heat Distribution	Two-pipe system to unit ventilators and convectors	Good	Exterior Lighting	LED floodlights - parking/ wallpacks not LED
Roof	Gym, classrooms have flat roof, single-ply membrane, rigid insulation, backer board, metal deck. Office, storage areas have rolled roofing on a flat wood deck with 3-1/2" of insulation. Mushroom section has pitched metal roof w/insulation.	Ventilation	Ventilators in mushroom ceiling. Exhaust fans ducted to classrooms	Good	Vending Machines	None
Windows	Double pane upgrades in 2011	Air Conditioning	Mini-split in mushroom, 6 window air conditioners	Excellent		
Insulation	Rigid insulation in flat roof, also roof insulation in mushroom section	Hot Water Heater	Gas-fired - 75 gal	Excellent		
Building Summary	The gymnasium, hall and toilet addition was added on the west side of the building, and classrooms ("mushroom"), were added on the east side in 1991. In 2011 roof repairs, window upgrades, and a new boiler were paid for through the Green Repair program.					

Energy Profile - FY2021		
Energy Usage		
Electric (kWh)	Heat (therms)	EUI (kBtu/sqft)
130,476	14,237	50
EUI ≤ 35 Meets Zero Energy Goal	EUI = 35-50 Efficient	EUI > 50 Priority to Improve
Annual Energy Cost		
Electric	Heat	Total
\$23,875	\$11,743	\$35,618
Berkshire Gas Rate Class	G-42	
Electric Service Rate Class	G2	
Average Monthly Demand (kW)	32.6	



Completed Work					
Fiscal Year	Project	Project Cost	Grants/Rebates	Life Expectancy	Warranty
2011	Windows, boiler, roof repairs/upgrades (MSBA)	\$1,617,964	\$1,264,356	varies	varies
2018	Rooftop unit replacement	\$75,000	\$40,000	20+ years	5 years
2019	LED lighting upgrade - on bill financed	\$20,148	\$9,532	20+ years	5 years

Audits/Assessments		
Fiscal Year	Type	Findings
2009	Siemens Whole building assessment	Report available upon request
2016	Insulation assessment CET	difficult to access ceiling. Leaks should be fixed, then insulation to be replaced
2019	Rooftop Solar Assessment (Solect Energy)	Roof can support a 135 kW solar array