

Fredericktown High School

805 E. Highway 72
Fredericktown, MO 63645

Built in 1976

66,000 Square Feet



Old System

Airconditioned Space:

Size	Area	Equipment
32,000 sqft.	classrooms, offices, library	Multizone Rooftop
4,000 sqft.	cafeteria	Rooftop
4,000 sqft.	band room, art room	Rooftop

Heat only space:

Size	Area	Equipment
12,000 sqft.	gym, locker rooms	Heat only
3,000 sqft.	commons	Heat only
11,000 sqft.	hallways	Heat only

Total Electric Cost \$1.54/sqft./year

New System

Airconditioned Space:

Size	Area	Equipment
32,000 sqft.	classrooms, offices, library	Daikin VRV
11,000 sqft.	hallways	Daikin VRV
4,000 sqft.	cafeteria, kitchen	15 ton RTU and 5 ton RTU
4,000 sqft.	band room, art room	15 ton RTU
12,000 sqft.	gym, locker rooms	(2) 20 ton RTU, 3 & 4 ton RTU's
3,000 sqft.	commons	12.5 ton RTU

* based on an electricity rate of \$0.10 per kWh

Total Electric Cost \$0.84/sqft./year

Total cost per year of **old** system was **\$101,640** to condition **40,000 sqft.**

Total cost per year of **new** system is **\$55,440** to heat and cool **all 66,000 sqft.**

That means a savings of **\$46,200** per year or **55%** of the operational cost while increasing the amount of space conditioned by **65%**!

That's an average of **over 3 times** more efficient cooling!

All while providing better comfort, quieter operation, and less maintenance hassle