

FAC 4428 STORAGE AND CUSTOMER ISSUE

FY22 SUC:	\$2.29 / SF
Source:	Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 4428 STORAGE AND CUSTOMER ISSUE

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 45
Average Size 14988.0

SUC \$2.29

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair 8" concrete block wall, 1st floor	25	2,280.00 S.F.	\$55,209.79	\$67,540.96	1.8000	1	1	\$67,540.96	\$67,540.96
Replace glass - 1st floor. (1% of glass) - alum. window	1	4.50 S.F.	\$54.26	\$63.77	45.0000	45	45	\$2,869.75	\$2,869.75
Repair 3' x 4' aluminum window - 1st floor	20	45.00 Ea.	\$11,785.38	\$13,873.56	2.2500	2	2	\$27,747.13	\$27,747.13
Repair 2'-0" x 3'-0" aluminum window - 2nd floor	20	30.00 Ea.	\$5,739.58	\$6,913.68	2.2500	2	2	\$13,827.35	\$13,827.35
Repair steel, painted, door	14	4.00 Ea.	\$2,500.30	\$2,976.02	3.2143	3	3	\$8,928.07	\$8,928.07
Refinish 3'-0" x 7'-0" steel, painted, door	4	4.00 Ea.	\$165.60	\$203.46	11.2500	11	11	\$2,238.11	\$2,238.11
Replace 3'-0" x 7'-0" steel, painted, door	45	4.00 Ea.	\$2,820.26	\$3,278.92	1.0000	1	1	\$3,278.92	\$3,278.92
Repair 12' x 12' aluminum single roll-up door	10	2.00 Ea.	\$2,421.95	\$2,805.69	4.5000	4	4	\$11,222.75	\$11,222.75
Replace 12' x 12' aluminum single roll-up door	35	2.00 Ea.	\$9,369.46	\$10,818.87	1.2857	1	1	\$10,818.87	\$10,818.87
Minor metal roof finish repairs, 2% of roof area, metal panel roofing	5	300.00 S.F.	\$1,047.93	\$1,257.29	9.0000	9	9	\$11,315.60	\$11,315.60
Minor metal roof panel replacement, 2.5% of roof area	20	450.00 S.F.	\$5,142.42	\$6,107.44	2.2500	2	2	\$12,214.87	\$12,214.87
Total metal roof panel replacement	30	150.00 Sq.	\$126,771.99	\$150,152.44	1.5000	1	1	\$150,152.44	\$150,152.44
Repair steel painted interior door	14	8.00 Ea.	\$2,347.62	\$2,732.51	3.2143	3	3	\$8,197.54	\$8,197.54
Refinish 3'-0" x 7'-0" steel painted interior door	4	8.00 Ea.	\$420.68	\$518.29	11.2500	11	11	\$5,701.20	\$5,701.20
Repair solid core wood door, interior	11	4.00 Ea.	\$1,173.81	\$1,366.26	4.0909	4	4	\$5,465.02	\$5,465.02
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	4.00 Ea.	\$173.46	\$213.00	11.2500	11	11	\$2,342.99	\$2,342.99
Replace brass lockset interior	30	4.00 Ea.	\$1,316.76	\$1,526.06	1.5000	1	1	\$1,526.06	\$1,526.06
Replace brass door closer	15	4.00 Ea.	\$911.40	\$1,072.10	3.0000	3	3	\$3,216.31	\$3,216.31
Replace panic bar	25	8.00 Ea.	\$9,492.27	\$10,906.32	1.8000	1	1	\$10,906.32	\$10,906.32
Replace toilet partitions, laminate clad-overhead braced, per stall	20	6.00 Ea.	\$6,785.30	\$7,863.02	2.2500	2	2	\$15,726.04	\$15,726.04
Replace urinal screen, stainless steel	30	6.00 Ea.	\$4,416.28	\$5,113.48	1.5000	1	1	\$5,113.48	\$5,113.48
Office painting, 10' x 12', 10' high walls	5	6.00 Ea.	\$1,325.92	\$1,626.38	9.0000	9	9	\$14,637.41	\$14,637.41
Refinish concrete floor finished	25	120.00 C.S.F.	\$50,619.28	\$60,801.63	1.8000	1	1	\$60,801.63	\$60,801.63
Replace vinyl tile flooring	18	250.00 S.Y.	\$12,350.87	\$15,167.51	2.5000	2	2	\$30,335.02	\$30,335.02
Acoustic tile repairs - (2% of ceilings)	9	4.50 C.S.F.	\$4,084.67	\$4,747.15	5.0000	5	5	\$23,735.73	\$23,735.73
Replace acoustic tile ceiling, fire-rated	20	15.00 C.S.F.	\$7,863.43	\$9,268.29	2.2500	2	2	\$18,536.58	\$18,536.58
Replace flush valve diaphragm tankless water closet	10	6.00 Ea.	\$157.32	\$195.22	4.5000	4	4	\$780.86	\$780.86
Unplug clogged line tankless water closet	5	6.00 Ea.	\$1,310.37	\$1,638.76	9.0000	9	9	\$14,748.85	\$14,748.85
Replace tankless flush valve	25	6.00 Ea.	\$1,513.29	\$1,776.66	1.8000	1	1	\$1,776.66	\$1,776.66

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace flush valve diaphragm for a urinal	7	4.00 Ea.	\$104.88	\$130.14	6.4286	6	6	\$780.86	\$780.86
Unplug line urinal	5	4.00 Ea.	\$580.29	\$725.71	9.0000	9	9	\$6,531.41	\$6,531.41
Replace washer in spud connection lavatory, vitreous china	7	8.00 Ea.	\$131.70	\$160.64	6.4286	6	6	\$963.84	\$963.84
Replace washer in faucet lavatory, vitreous china	2	8.00 Ea.	\$103.08	\$128.41	22.5000	22	22	\$2,825.12	\$2,825.12
Clean out strainer and P trap lavatory, vitreous china	2	8.00 Ea.	\$278.95	\$348.86	22.5000	22	22	\$7,674.99	\$7,674.99
Replace faucet washer sink, service/utility	2	8.00 Ea.	\$102.21	\$127.33	22.5000	22	22	\$2,801.21	\$2,801.21
Check / minor repairs drinking fountain	1	2.00 Ea.	\$97.76	\$122.27	45.0000	45	45	\$5,501.93	\$5,501.93
Repair internal leaks drinking fountain	4	2.00 Ea.	\$90.16	\$112.76	11.2500	11	11	\$1,240.31	\$1,240.31
Replace refrigerant drinking fountain	2	2.00 Ea.	\$65.37	\$76.54	22.5000	22	22	\$1,683.85	\$1,683.85
Repair drain leak drinking fountain	4	2.00 Ea.	\$67.83	\$81.07	11.2500	11	9	\$891.76	\$729.62
Replace fountain drinking fountain	10	2.00 Ea.	\$2,562.31	\$3,029.12	4.5000	4	4	\$12,116.47	\$12,116.47
Overhaul water heater, gas / oil, 30 gallon	5	2.00 Ea.	\$233.77	\$292.35	9.0000	9	9	\$2,631.15	\$2,631.15
Clean and service water heater, gas / oil, 30 gallon	1	2.00 Ea.	\$393.23	\$491.78	45.0000	45	45	\$22,130.00	\$22,130.00
Replace water heater, gas / oil, 30 gallon	10	2.00 Ea.	\$6,123.43	\$7,092.64	4.5000	4	4	\$28,370.54	\$28,370.54
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	4.00 Ea.	\$15,759.33	\$18,293.66	2.2500	2	2	\$36,587.32	\$36,587.32
Maintenance and repair infrared heater suspended, commercial	1	8.00 Ea.	\$336.99	\$422.20	45.0000	45	45	\$18,999.15	\$18,999.15
Maintenance and inspection infrared heater suspended, commercial	0.5	8.00 Ea.	\$630.78	\$790.28	90.0000	90	90	\$71,125.03	\$71,125.03
Repair single zone rooftop unit, 15 ton	10	1.00 Ea.	\$31,902.03	\$36,862.57	4.5000	4	4	\$147,450.30	\$147,450.30
Replace single zone rooftop unit, 15 ton	15	1.00 Ea.	\$22,261.64	\$26,138.10	3.0000	3	3	\$78,414.30	\$78,414.30
Repair central station A.H.U., 5400 CFM	10	1.00 Ea.	\$827.08	\$970.82	4.5000	4	3	\$3,883.28	\$2,912.46
Replace central station A.H.U., 5400 CFM	15	1.00 Ea.	\$23,424.06	\$27,083.63	3.0000	3	3	\$81,250.90	\$81,250.90
Rebuild 4" diameter reduced pressure backflow preventer	10	1.00 Ea.	\$664.67	\$779.78	4.5000	4	4	\$3,119.13	\$3,119.13
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	45.0000	45	45	\$1,931.79	\$1,931.79
Maintenance and repair motor starter, up to 600 V	5	2.00 Ea.	\$559.28	\$675.20	9.0000	9	9	\$6,076.76	\$6,076.76
Maintenance and inspection motor starter, up to 600 V	0.5	2.00 Ea.	\$107.96	\$135.26	90.0000	90	90	\$12,173.41	\$12,173.41
Maintenance and inspection lighting panel, indoor	3	4.00 Ea.	\$162.58	\$203.69	15.0000	15	15	\$3,055.29	\$3,055.29
Maintenance and inspection circuit breaker, molded case, 480 V, 1 pole	0.5	6.00 Ea.	\$194.33	\$243.47	90.0000	90	90	\$21,912.15	\$21,912.15
Maintenance and repair breaker, molded case, 480 V, 2 pole	20	6.00 Ea.	\$430.58	\$539.45	2.2500	2	2	\$1,078.90	\$1,078.90

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Maintenance and inspection safety switch, 2 pole	1	1.00 Ea.	\$40.64	\$50.92	45.0000	45	45	\$2,291.47	\$2,291.47	
Replace fluorescent light fixture ballast, 80 W	10	50.00 Ea.	\$6,233.42	\$7,561.86	4.5000	4	4	\$30,247.45	\$30,247.45	
Maintenance and repair lightning ground rod	1	4.00 Ea.	\$351.56	\$439.15	45.0000	45	44	\$19,761.69	\$19,322.54	
Replace lightning ground rod	25	2.00 Ea.	\$452.18	\$560.58	1.8000	1	1	\$560.58	\$560.58	
Replace lamp emergency lighting fixture	2	6.00 Ea.	\$328.14	\$395.25	22.5000	22	22	\$8,695.59	\$8,695.59	
Maintenance and repair exit light	20	6.00 Ea.	\$223.21	\$276.02	2.2500	2	2	\$552.04	\$552.04	
Replace lamp exit light	5	6.00 Ea.	\$101.08	\$119.78	9.0000	9	9	\$1,078.03	\$1,078.03	
Replace lamps (2 lamps), 4', 34 W energy saver	10	50.00 Ea.	\$1,260.70	\$1,578.95	4.5000	4	4	\$6,315.79	\$6,315.79	
Replace metal halide ballast, 175 W	10	45.00 Ea.	\$6,681.80	\$8,023.54	4.5000	4	4	\$32,094.18	\$32,094.18	
Replace metal halide fixture lamp, 175 W	5	45.00 Ea.	\$2,249.42	\$2,751.91	9.0000	9	9	\$24,767.23	\$24,767.23	
Repair smoke detector	10	45.00 Ea.	\$2,537.44	\$3,137.13	4.5000	4	4	\$12,548.53	\$12,548.53	
Check operation smoke detector	1	45.00 Ea.	\$728.74	\$913.01	45.0000	45	45	\$41,085.27	\$41,085.27	
Check and repair manual pull station	10	6.00 Ea.	\$526.18	\$646.98	4.5000	4	4	\$2,587.93	\$2,587.93	
Minor repairs to fire alarm control panel	5	1.00 Ea.	\$149.71	\$182.27	9.0000	9	9	\$1,640.47	\$1,640.47	
Minor repairs to annunciation panel	5	1.00 Ea.	\$149.71	\$182.27	9.0000	9	9	\$1,640.47	\$1,640.47	
Replace fire alarm bell, 6"	20	4.00 Ea.	\$779.85	\$941.10	2.2500	2	2	\$1,882.20	\$1,882.20	
Maintenance and repair of general wiring lightning protection system	1	1.00 M.L.F.	\$96.72	\$119.83	45.0000	45	45	\$5,392.19	\$5,392.19	
			\$460,412.77	\$546,505.97				MR Subtotal	\$1,320,472.71	
									MR Per Year	\$29,343.84
									PM Total	\$4,985.27
									Subtotal	\$34,329.11
									Total Per Unit	\$2.29

FAC 4428 STORAGE AND CUSTOMER ISSUE

SUC \$2.29

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 45

Type PM

Average Size 14988.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	2.00	8.14	\$81.92	\$337.62	\$0.00	\$419.54	\$529.02	\$642.60
Fire doors, swinging, annualized	4.00	1.57	\$57.28	\$58.23	\$0.00	\$115.52	\$138.71	\$164.77
Urinals, annualized	4.00	0.91	\$25.27	\$45.81	\$0.00	\$71.09	\$87.36	\$104.89
Toilet (vacuum breaker type), annualized	6.00	1.06	\$50.65	\$53.39	\$0.00	\$104.04	\$125.12	\$148.74
Lavatories, annualized	8.00	2.78	\$47.72	\$165.63	\$0.00	\$213.35	\$267.81	\$324.65
Drink fountain, annualized	2.00	1.24	\$41.45	\$62.55	\$0.00	\$104.00	\$126.91	\$151.90
Air handling unit, 3 thru 24 tons, annualized	1.00	2.06	\$224.44	\$103.96	\$0.00	\$328.40	\$382.03	\$446.89
Fan, axial, 5,000 to 10,000 CFM, annualized	4.00	5.16	\$143.56	\$259.01	\$0.00	\$402.58	\$494.64	\$593.87
Heat pump, air cooled, over 5 ton, annualized	1.00	3.59	\$182.99	\$215.84	\$0.00	\$398.84	\$481.89	\$574.09
Controls, central system, electro/pneumatic, annualized	1.00	1.92	\$70.77	\$115.41	\$0.00	\$186.18	\$227.88	\$273.12
Backflow prevention device, up to 4", annualized	1.00	0.33	\$13.40	\$19.82	\$0.00	\$33.22	\$40.50	\$48.46
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Motor control center, over 400 A, annualized	2.00	0.78	\$46.39	\$51.80	\$0.00	\$98.19	\$118.37	\$140.87
Light, emergency, hardwired system, annualized	6.00	1.50	\$46.39	\$88.58	\$0.00	\$134.97	\$166.19	\$199.72
						\$3,356.52	\$4,143.38	\$4,985.27

FAC 4428 STORAGE AND CUSTOMER ISSUE

Modeled Component List CostWorks Release 2021 Qtr 3

B20 Exterior Enclosure	
Steel, Painted	4.0 Ea.
Aluminum Single, Roll-Up	2.0 Ea.
B30 Roofing	
Metal Steep Roofing	150.0 Sq.
C10 Interior Construction	
Lockset, Brass	4.0 Ea.
Door Closer, Brass	4.0 Ea.
Panic Bar	8.0 Ea.
Urinal Screen	6.0 Ea.
Fire Doors, Swinging, annualized	4.0 Each
C30 Interior Finishes	
Concrete, Finished	120.0 C.S.F.
Vinyl	250.0 S.Y.
Acoustic Tile, fire-rated	15.0 C.S.F.
D20 Plumbing	
Drinking Fountain	2.0 Ea.
Water Heater, Gas / Oil, 30 Gallon	2.0 Ea.
D30 HVAC	
Exhaust Fan, roof mounted exhaust fan, 8500 CFM exhaust	4.0 Ea.
Single Zone Air Conditioner, 15 ton	1.0 Ea.
Central Station Air Conditioning Air Handling Unit, 5400 CFM	1.0 Ea.
D40 Fire Protection	
Backflow Preventer	1.0 Ea.
D50 Electrical	
Load Center, 100 A, maintenance & inspection	4.0 Ea.
Lightning Ground Rod	2.0 Ea.
Fire Alarm Bell	4.0 Ea.

FAC 4428 STORAGE AND CUSTOMER ISSUE
Sustainment by Year
CostWorks Release 2021 Qtr 3

