

FAC 7387 EXCHANGE SUPPORT FACILITY

FY24 SUC: \$5.37 / SF
Source: Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 7387 EXCHANGE SUPPORT FACILITY

SUC \$5.37

Release 2023 Qtr 4
Zip Code Prefix 222
Type MR

UM SF
Design Life 50
Average Size 6547.3460000000005

Adjusted Occurences 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
Replace flush valve diaphragm for a urinal	7	3.00 Ea.	\$81.79	\$101.57	7.1429	7	7	\$710.98	\$710.98
Rebuild flush valve for a urinal	20	3.00 Ea.	\$575.64	\$693.81	2.5000	2	2	\$1,387.61	\$1,387.61
Unplug line urinal	5	3.00 Ea.	\$457.93	\$573.24	10.0000	10	10	\$5,732.45	\$5,732.45
Replace wall-hung urinal	35	3.00 Ea.	\$3,262.56	\$3,924.14	1.4286	1	1	\$3,924.14	\$3,924.14
Replace washer in spud connection lavatory, vitreous china	7	8.00 Ea.	\$138.57	\$169.13	7.1429	7	7	\$1,183.89	\$1,183.89
Replace washer in faucet lavatory, vitreous china	2	8.00 Ea.	\$108.54	\$135.34	25.0000	25	25	\$3,383.44	\$3,383.44
Replace faucets lavatory, vitreous china	10	8.00 Ea.	\$1,563.78	\$1,880.97	5.0000	5	5	\$9,404.86	\$9,404.86
Clean out strainer and P trap lavatory, vitreous china	2	8.00 Ea.	\$294.55	\$368.73	25.0000	25	25	\$9,218.14	\$9,218.14
Replace lavatory, vitreous china	35	8.00 Ea.	\$5,749.78	\$6,907.25	1.4286	1	1	\$6,907.25	\$6,907.25
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$13.45	\$16.77	25.0000	25	25	\$419.23	\$419.23
Clean trap sink, iron enamel	3	1.00 Ea.	\$9.01	\$11.27	16.6667	16	16	\$180.39	\$180.39
Replace faucets sink, iron enamel	10	1.00 Ea.	\$195.47	\$235.12	5.0000	5	5	\$1,175.61	\$1,175.61
Unstop sink, iron enamel	2	1.00 Ea.	\$44.01	\$55.09	25.0000	25	25	\$1,377.35	\$1,377.35
Replace sink, P.E.C.I. sink, iron enamel kitchen	10	1.00 Ea.	\$1,208.43	\$1,409.28	5.0000	5	5	\$7,046.38	\$7,046.38
Replace pipe and fittings, copper 3/4"	20	32.00 L.F.	\$799.91	\$969.47	2.5000	2	2	\$1,938.94	\$1,938.94
Drain and flush water heater, electric, 120 gallon	7	1.00 Ea.	\$309.15	\$387.00	7.1429	7	7	\$2,709.00	\$2,709.00
Check operation water heater, electric, 120 gallon	3	1.00 Ea.	\$2.72	\$3.40	16.6667	16	16	\$54.40	\$54.40
Replace water heater, electric, 120 gallon	15	1.00 Ea.	\$16,477.14	\$18,839.91	3.3333	3	3	\$56,519.72	\$56,519.72
Unclog floor drain, PVC	20	1.00 Ea.	\$50.45	\$63.16	2.5000	2	2	\$126.31	\$126.31
Replace drain: roof, scupper, area	40	2.00 Ea.	\$2,260.75	\$2,607.70	1.2500	1	1	\$2,607.70	\$2,607.70
Repair boiler, gas, 250 MBH	7	1.00 Ea.	\$2,758.88	\$3,222.41	7.1429	7	7	\$22,556.86	\$22,556.86
Replace boiler, gas, 250 MBH	30	1.00 Ea.	\$9,616.21	\$11,488.35	1.6667	1	1	\$11,488.35	\$11,488.35
Repair circulator pump, 1/12 - 3/4 H.P.	5	1.00 Ea.	\$103.47	\$122.05	10.0000	10	7	\$1,220.52	\$854.36
Replace manual pull station	15	2.00 Ea.	\$417.52	\$503.53	3.3333	3	3	\$1,510.58	\$1,510.58
Replace fire alarm bell, 6"	20	2.00 Ea.	\$361.21	\$439.54	2.5000	2	2	\$879.09	\$879.09
Maintenance and repair of general wiring lightning protection system	1	1.00 M.L.F.	\$109.50	\$134.89	50.0000	50	50	\$6,744.34	\$6,744.34
Replace lightning protection general wiring system	25	1.00 M.L.F.	\$12,548.36	\$14,875.43	2.0000	2	2	\$29,750.85	\$29,750.85
Maintenance and repair lightning ground rod	1	2.00 Ea.	\$184.57	\$230.64	50.0000	50	48	\$11,532.16	\$11,070.87
Replace lightning ground rod	25	4.00 Ea.	\$982.42	\$1,214.69	2.0000	2	2	\$2,429.37	\$2,429.37
Replace lamp emergency lighting fixture	2	4.00 Ea.	\$217.97	\$263.42	25.0000	25	25	\$6,585.50	\$6,585.50
Replace emergency lighting fixture	20	4.00 Ea.	\$2,299.22	\$2,719.49	2.5000	2	2	\$5,438.99	\$5,438.99
Maintenance and repair exit light	20	4.00 Ea.	\$153.96	\$190.68	2.5000	2	2	\$381.36	\$381.36
Replace lamp exit light	5	4.00 Ea.	\$65.39	\$77.75	10.0000	10	10	\$777.54	\$777.54
Replace lighting fixture exit light	20	4.00 Ea.	\$704.26	\$854.03	2.5000	2	2	\$1,708.06	\$1,708.06

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace circulator pump, 1/12 - 3/4 H.P.	15	1.00 Ea.	\$3,796.05	\$4,376.03	3.3333	3	3	\$13,128.10	\$13,128.10
Repair damaged pipe insulation, fiberglass 3/4"	5	4.00 Ea.	\$88.60	\$108.27	10.0000	10	10	\$1,082.70	\$1,082.70
Replace pipe insulation, fiberglass 3/4"	5	0.03 M.L.F.	\$271.79	\$330.79	10.0000	10	10	\$3,307.88	\$3,307.88
Repair terminal reheat, 12" x 24" coil	10	1.00 Ea.	\$93.39	\$116.91	5.0000	5	4	\$584.53	\$467.63
Replace terminal reheat, 12" x 24" coil	15	1.00 Ea.	\$1,989.29	\$2,281.38	3.3333	3	3	\$6,844.13	\$6,844.13
Repair single zone rooftop unit, 25 ton	10	1.00 Ea.	\$54,305.81	\$62,518.61	5.0000	5	4	\$312,593.03	\$250,074.42
Replace single zone rooftop unit, 25 ton	15	1.00 Ea.	\$52,455.46	\$60,922.27	3.3333	3	3	\$182,766.81	\$182,766.81
Repair central station A.H.U., 8000 CFM	10	1.00 Ea.	\$1,802.39	\$2,085.97	5.0000	5	4	\$10,429.85	\$8,343.88
Replace central station A.H.U., 8000 CFM	15	1.00 Ea.	\$40,394.19	\$46,556.29	3.3333	3	3	\$139,668.88	\$139,668.88
Rebuild 4" diameter reduced pressure backflow preventer	10	1.00 Ea.	\$921.17	\$1,072.81	5.0000	5	5	\$5,364.06	\$5,364.06
Inspect sprinkler system	1	1.00 Ea.	\$36.17	\$45.28	50.0000	50	50	\$2,264.22	\$2,264.22
Replace sprinkler head	20	29.00 Ea.	\$2,541.79	\$3,136.40	2.5000	2	2	\$6,272.81	\$6,272.81
Replace fuse	25	14.00 Ea.	\$6,396.53	\$7,345.36	2.0000	2	2	\$14,690.73	\$14,690.73
Replace starter motor starter, up to 600 V	18	2.00 Ea.	\$1,682.04	\$2,001.49	2.7778	2	2	\$4,002.99	\$4,002.99
Maintenance and inspection lighting panel, indoor	3	2.00 Ea.	\$84.69	\$106.10	16.6667	16	16	\$1,697.64	\$1,697.64
Replace circuit breaker enclosed, 240 V, 2 pole circuit breaker	50	24.00 Ea.	\$19,546.36	\$22,914.59	1.0000	1	1	\$22,914.59	\$22,914.59
Repair failed breaker, enclosed, 600 V, 3 pole	4	1.00 Ea.	\$1,083.33	\$1,251.96	12.5000	12	12	\$15,023.53	\$15,023.53
Maintenance and inspection circuit breaker, enclosed, 600 V, 3 pole	0.33	1.00 Ea.	\$34.13	\$42.76	151.5152	151	151	\$6,456.40	\$6,456.40
Replace circuit breaker enclosed, 600 V, 3 pole circuit breaker	50	1.00 Ea.	\$1,029.72	\$1,215.29	1.0000	1	1	\$1,215.29	\$1,215.29
Maintenance and repair incandescent lighting fixtures	10	9.00 Ea.	\$606.01	\$724.03	5.0000	5	3	\$3,620.14	\$2,172.08
Replace incandescent lighting fixture lamp	5	9.00 Ea.	\$115.56	\$139.08	10.0000	10	10	\$1,390.84	\$1,390.84
Replace incandescent lighting fixture	20	9.00 Ea.	\$1,257.42	\$1,525.13	2.5000	2	2	\$3,050.27	\$3,050.27
Replace fluorescent light fixture ballast, 80 W	10	60.00 Ea.	\$6,276.37	\$7,739.45	5.0000	5	5	\$38,697.24	\$38,697.24
Replace lamps (2 lamps), 4', 34 W energy saver	10	60.00 Ea.	\$1,589.14	\$1,990.14	5.0000	5	5	\$9,950.68	\$9,950.68
Repair smoke detector	10	12.00 Ea.	\$696.12	\$861.99	5.0000	5	4	\$4,309.95	\$3,447.96
Check operation smoke detector	1	12.00 Ea.	\$204.01	\$255.60	50.0000	50	50	\$12,779.78	\$12,779.78
Replace smoke detector	15	12.00 Ea.	\$3,630.63	\$4,334.62	3.3333	3	3	\$13,003.86	\$13,003.86
Check and repair manual pull station	10	2.00 Ea.	\$179.77	\$221.49	5.0000	5	4	\$1,107.47	\$885.97
Repair clay brick wall, 1st floor	25	250.00 S.F.	\$11,312.28	\$13,904.61	2.0000	2	2	\$27,809.22	\$27,809.22
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	6.60 S.F.	\$86.78	\$101.91	50.0000	50	50	\$5,095.37	\$5,095.37
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	32.00 Ea.	\$5,002.02	\$5,960.69	2.5000	2	2	\$11,921.37	\$11,921.37
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	32.00 Ea.	\$21,681.29	\$25,449.70	1.0000	1	1	\$25,449.70	\$25,449.70

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace glass - 2nd floor (1% of glass) - alum. window fixed	1	2.30 S.F.	\$260.61	\$321.72	50.0000	50	50	\$16,086.00	\$16,086.00
Repair steel, painted, door	14	3.00 Ea.	\$2,107.00	\$2,502.58	3.5714	3	3	\$7,507.73	\$7,507.73
Refinish 3'-0" x 7'-0" steel, painted, door	4	3.00 Ea.	\$138.16	\$169.19	12.5000	12	12	\$2,030.26	\$2,030.26
Replace 3'-0" x 7'-0" steel, painted, door	45	3.00 Ea.	\$2,751.33	\$3,185.78	1.1111	1	1	\$3,185.78	\$3,185.78
Replace tempered glass - (3% of glass) steel painted door	1	0.06 S.F.	\$1.90	\$2.25	50.0000	50	50	\$112.39	\$112.39
Prepare and refinish 3'-0" x 7'-0" steel painted. door	4	2.00 Ea.	\$173.66	\$214.32	12.5000	12	12	\$2,571.85	\$2,571.85
Replace 3'-0" x 7'-0" steel, with wire glass, door	45	2.00 Ea.	\$3,469.48	\$4,019.33	1.1111	1	1	\$4,019.33	\$4,019.33
Repair 12' x 12' aluminum single roll-up door	10	1.00 Ea.	\$1,040.38	\$1,210.84	5.0000	5	5	\$6,054.19	\$6,054.19
Replace 12' x 12' aluminum single roll-up door	35	1.00 Ea.	\$4,008.79	\$4,647.33	1.4286	1	1	\$4,647.33	\$4,647.33
Non-destructive moisture inspection, modified bituminous/thermoplastic	5	5.90 M.S.F.	\$744.86	\$908.51	10.0000	10	10	\$9,085.10	\$9,085.10
Minor thermoplastic membrane repairs, 2% of roof area	1	1.20 Sq.	\$389.46	\$465.07	50.0000	50	50	\$23,253.48	\$23,253.48
Flashing repairs, 2 S.F. per sq. repaired, modified bitumen/thermoplastic	1	1.10 S.F.	\$4.34	\$5.21	50.0000	50	50	\$260.45	\$260.45
Membrane replacement-(25% of roof area),modified bitum/thermoplastic	20	15.00 Sq.	\$12,712.02	\$15,178.88	2.5000	2	2	\$30,357.75	\$30,357.75
Total roof replacement, modified bituminous / thermoplastic	25	59.00 Sq.	\$40,235.59	\$47,761.68	2.0000	2	2	\$95,523.36	\$95,523.36
Repair 8" concrete block wall - (2% of walls) painted	25	0.30 C.S.F.	\$343.47	\$413.13	2.0000	2	2	\$826.26	\$826.26
Refinish concrete block wall painted	4	19.90 C.S.F.	\$2,361.94	\$2,855.51	12.5000	12	12	\$34,266.17	\$34,266.17
Repair steel painted interior door	14	2.00 Ea.	\$557.98	\$651.36	3.5714	3	3	\$1,954.09	\$1,954.09
Refinish 3'-0" x 7'-0" steel painted interior door	4	2.00 Ea.	\$115.30	\$141.75	12.5000	12	12	\$1,701.05	\$1,701.05
Repair solid core wood door, interior	11	19.00 Ea.	\$5,300.78	\$6,187.96	4.5455	4	4	\$24,751.85	\$24,751.85
Replace 3'-0" x 7'-0" solid core wood door, interior	40	19.00 Ea.	\$10,764.45	\$12,427.86	1.2500	1	1	\$12,427.86	\$12,427.86
Repair concrete steps	15	43.00 S.F.	\$1,344.80	\$1,550.15	3.3333	3	3	\$4,650.44	\$4,650.44
Refinish metal stair railing, interior	7	43.00 S.F.	\$68.49	\$84.30	7.1429	7	7	\$590.08	\$590.08
Replace metal stair railing, interior	45	43.00 L.F.	\$2,005.57	\$2,346.96	1.1111	1	1	\$2,346.96	\$2,346.96
Repair fabric wall finish fabric interior	9	200.00 S.Y.	\$6,299.08	\$7,572.40	5.5556	5	5	\$37,861.99	\$37,861.99
Replace fabric wall finish fabric interior	50	200.00 S.Y.	\$31,177.21	\$38,513.60	1.0000	1	1	\$38,513.60	\$38,513.60
Repair 5/8" drywall - (2% of walls)	20	220.00 S.F.	\$367.60	\$449.24	2.5000	2	2	\$898.47	\$898.47
Refinish concrete floor finished	25	4.00 C.S.F.	\$1,666.31	\$2,010.47	2.0000	2	2	\$4,020.95	\$4,020.95
Replace vinyl tile flooring	18	16.30 S.Y.	\$832.75	\$1,024.81	2.7778	2	2	\$2,049.62	\$2,049.62
Terrazzo floor repairs - (2% of floors)	15	15.90 S.F.	\$271.90	\$325.91	3.3333	3	3	\$977.74	\$977.74
Replace carpet	8	91.00 S.Y.	\$4,913.69	\$5,682.27	6.2500	6	6	\$34,093.59	\$34,093.59
Repair gypsum board ceiling - (2% of ceilings)	20	0.10 C.S.F.	\$38.42	\$47.18	2.5000	2	2	\$94.36	\$94.36

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace gypsum board ceiling, up to 12' high	40	5.30 C.S.F.	\$2,088.78	\$2,565.67	1.2500	1	1	\$2,565.67	\$2,565.67	
Acoustic tile repairs - (2% of ceilings)	9	1.00 C.S.F.	\$923.79	\$1,074.73	5.5556	5	5	\$5,373.65	\$5,373.65	
Replace flush valve diaphragm tankless water closet	10	6.00 Ea.	\$163.58	\$203.14	5.0000	5	5	\$1,015.68	\$1,015.68	
Rebuild flush valve tankless water closet	20	6.00 Ea.	\$1,151.29	\$1,387.61	2.5000	2	2	\$2,775.23	\$2,775.23	
Unplug clogged line tankless water closet	5	6.00 Ea.	\$1,379.57	\$1,726.99	10.0000	10	10	\$17,269.90	\$17,269.90	
Replace tankless water closet	35	6.00 Ea.	\$8,499.33	\$9,829.92	1.4286	1	1	\$9,829.92	\$9,829.92	
Replace tankless flush valve	25	6.00 Ea.	\$1,621.46	\$1,903.31	2.0000	2	2	\$3,806.61	\$3,806.61	
Replace wax ring gasket for tankless water closet	5	6.00 Ea.	\$894.99	\$1,119.32	10.0000	10	10	\$11,193.21	\$11,193.21	
			\$458,506.99	\$540,014.47				MR Subtotal	\$1,519,974.90	
									MR Per Year	\$30,335.05
									PM Total	\$4,797.94
									Subtotal	\$35,132.99
									Total Per Unit	\$5.37

FAC 7387 EXCHANGE SUPPORT FACILITY

SUC \$5.37

Release 2023 Qtr 4

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 6547.3460000000005

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Drink fountain, annualized	2.00	1.24	\$74.89	\$66.27	\$0.00	\$141.16	\$168.53	\$199.65
Boiler, hot water, oil, gas, or comb. fired, up to 120 MBH, annualized	1.00	12.53	\$88.55	\$793.52	\$0.00	\$882.07	\$1,128.98	\$1,380.32
Chiller, recip., air cooled, up to 25 tons, annualized	1.00	9.72	\$104.24	\$614.76	\$0.00	\$719.00	\$913.85	\$1,113.91
Air handling unit, 3 thru 24 tons, annualized	1.00	2.06	\$159.90	\$109.87	\$0.00	\$269.77	\$318.72	\$375.67
VAV Boxes, annualized	4.00	3.74	\$43.52	\$235.44	\$0.00	\$278.96	\$353.94	\$431.10
Circuit breaker, high voltage air, annualized	1.00	0.47	\$13.83	\$32.48	\$0.00	\$46.31	\$57.43	\$69.25
Panelboard, 225 A and above, annualized	1.00	0.44	\$22.00	\$30.41	\$0.00	\$52.42	\$63.74	\$76.16
Light, emergency, hardwired system, annualized	6.00	1.50	\$53.88	\$94.65	\$0.00	\$148.53	\$182.31	\$218.78
Backflow prevention device, up to 4", annualized	1.00	0.33	\$14.02	\$20.93	\$0.00	\$34.94	\$42.62	\$51.01
Door, emergency egress, swinging, annualized	5.00	1.30	\$83.82	\$57.42	\$0.00	\$141.23	\$166.84	\$196.64
Fire doors, swinging, annualized	4.00	1.57	\$62.66	\$61.82	\$0.00	\$124.49	\$149.30	\$177.25
Urinals, annualized	3.00	0.68	\$19.89	\$36.49	\$0.00	\$56.38	\$69.32	\$83.25
Toilet (vacuum breaker type), annualized	6.00	1.06	\$53.13	\$56.77	\$0.00	\$109.90	\$132.24	\$157.24
Lavatories, annualized	6.00	2.09	\$46.75	\$130.80	\$0.00	\$177.55	\$221.47	\$267.72
						\$3,182.69	\$3,969.29	\$4,797.94

FAC 7387 EXCHANGE SUPPORT FACILITY

Modeled Component List

CostWorks Release 2023 Qtr 4

D20 Plumbing

Urinal	3.0 Ea.
Lavatory, Vitreous China	8.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Water Heater, Electric, 120 Gallon	1.0 Ea.
Drain: Roof, Scupper, Area	2.0 Ea.
Tankless Water Closet	6.0 Ea.

D30 HVAC

Boiler, Gas, 250 MBH	1.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	1.0 Ea.
Terminal Reheat Coil, 12" x 24"	1.0 Ea.
Single Zone Air Conditioner, 25 ton	1.0 Ea.
Central Station Air Conditioning Air Handling Unit, 8000 CFM	1.0 Ea.
VAV Box	4.0 Each

D50 Electrical

Manual Pull Station	2.0 Ea.
Fire Alarm Bell	2.0 Ea.
Lightning Protection System	1.0 M.L.F.
Lightning Ground Rod	4.0 Ea.
Emergency Lighting Fixture	4.0 Ea.
Exit Light	4.0 Ea.
Motor Starter, Up To 600 V	2.0 Ea.
Load Center, 100 A, maintenance & inspection	2.0 Ea.
Circuit Breaker, enclosed, 600 V, 3 pole	1.0 Ea.
Incandescent Lighting Fixtures	9.0 Ea.
Smoke Detector	12.0 Ea.

D40 Fire Protection

Backflow Preventer	1.0 Ea.
Sprinkler System, Fire Suppression, sprinkler head	29.0 Ea.

B20 Exterior Enclosure

Aluminum Window, Fixed, 1st floor	32.0 Ea.
Steel, Painted	3.0 Ea.
Steel, Painted, w/ wire glass	2.0 Ea.
Aluminum Single, Roll-Up	1.0 Ea.

B30 Roofing

Modified Bituminous / Thermoplastic	59.0 Sq.
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C10 Interior Construction

Concrete Block, Painted	19.9 C.S.F.
Solid Core Interior Doors	19.0 Ea.
Fire Doors, Swinging, annualized	4.0 Each

C20 Stairs

Metal Interior Stair Railing	43.0 L.F.
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C30 Interior Finishes

Fabric Interior Wall Finish	200.0 S.Y.
Concrete, Finished	4.0 C.S.F.
Vinyl	16.3 S.Y.
Carpet	91.0 S.Y.
Gypsum Wall Board	5.3 C.S.F.

FAC 7387 EXCHANGE SUPPORT FACILITY
Sustainment by Year
CostWorks Release 2023 Qtr 4

